

Reflections

World Cities Summit 2018

Liveable & Sustainable Cities: Embracing the
Future through Innovation and Collaboration





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Future through Innovation and Collaboration



FOREWORD



LAWRENCE WONG

**Minister for National Development
and Second Minister for Finance,
Singapore**

The 6th edition of the World Cities Summit was held in Singapore from 8–12 July 2018, under the theme ‘Liveable & Sustainable Cities: Embracing the Future through Innovation and Collaboration’.

Embracing the future means accepting change. If you liken the city to a living organism, there is no such a thing as a status quo – you are either improving or declining. So we should welcome disruptive innovations that enable us to improve and thrive, and the Summit surfaced many good examples of this.

At the same time, participants emphasised the importance of being human-centred. Cities are ‘social reactors’ that catalyse human connections. People enjoy being in cities for these connections, and because of the tremendous benefits that they offer. Even as we embrace disruptive ideas and technologies, we must keep human betterment and connections at the heart of our cities.

This commemorative book, ‘Reflections: World Cities Summit 2018’, shares highlights and insights gleaned from the fulfilling discussions with key delegates, speakers, and partners during the Summit. Thank you for your support of World Cities Summit 2018, and we look forward to welcoming many of you back at the 10th annual World Cities Summit Mayors Forum and Young Leaders Symposium in Medellín, Colombia, from 10–12 July 2019, before we reconvene at the next World Cities Summit from 5–9 July 2020 in Singapore.



Braddon - Urban Renewal meets Hipster Haven. Source: Canberra.

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The biennial World Cities Summit (WCS) is an exclusive platform for government leaders and industry experts to address liveable and sustainable city challenges, share integrated urban solutions and forge new partnerships. Jointly organised by Singapore's Centre for Liveable Cities (CLC) and the Urban Redevelopment Authority (URA), key highlights of the Summit include the WCS Mayors Forum, the Lee Kuan Yew World City Prize and the WCS Young Leaders Symposium.

The next WCS Mayors Forum will be held from 10–12 July 2019 in Medellín, Colombia.

The next edition of the World Cities Summit will be held from 5–9 July 2020 in Singapore.

For more information, visit: www.worldcityssummit.com.sg.



HIGHLIGHTS



HIGHLIGHTS

Plenaries

Insights sharing by high-level speakers from governments, international organisations and industry sectors on cross-disciplinary policies, management strategies and solutions.

WCS Mayors Forum

The WCS Mayors Forum is an exclusive, by-invitation-only, global platform for mayors and city leaders to discuss pressing urban challenges and share best practices.

WCS Young Leaders Symposium

The WCS Young Leaders is a group of change-makers from diverse sectors who shape the global urban agenda at the annual WCS Young Leaders Symposium. These passionate leaders discuss ways to tackle urbanisation challenges.

Thematic Tracks

Four Thematic Tracks are held concurrently for speakers to deep-dive into topical issues on Urban Governance, Planning, Resilience and Innovation. Case studies and best practices are shared by city leaders and practitioners who have directly led projects to their successful conclusion.

Lee Kuan Yew World City Prize

Inaugurated in 2010 and named after Singapore's first Prime Minister, the Lee Kuan Yew World City Prize is a biennial international award that honours outstanding achievements and contributions to the creation of liveable, vibrant and sustainable urban communities around the world.

Co-Located Events

Co-Located Events are organised by our partnering organisations and each session deep-dives into specific topics related to liveable and sustainable cities. The Co-Located Events complement and reinforce the main programme of the WCS.

City Solutions Singapore

City Solutions Singapore (CSS) is the preferred global platform for over 1,000 companies to showcase new and cutting-edge solutions for smart nations and urban environments. CSS provides the catalyst to seek new partnerships and business opportunities across the value chain of sustainable development.

VOICES



“ A gathering like this brings together international networks of cities and finds that collective voice of cities all over the world. [Thus] a forum like this is absolutely essential to [harness] that voice, and making sure that [it] is heard on the global stage. ”

MARVIN REES
Mayor of Bristol



“ [A] goal of my visit here is not only learning, but also making friends. It is very important that we make friends, not only from the angle of this conference, but also from the angle of geopolitical circumstances in the world. Mayors can continue to build peace in the world. We can also help each other in building peace and security in the world. ”

AHMED ABOUTALEB
Mayor, Rotterdam



“ It's remarkable that the summit manages to bring so many experts, so many companies, so many institutions from the whole world. Not only from Asia, but I can [also] see a very strong presence from Europe. ”

JERZY KWIECIŃSKI
Minister,
Investment and Economic Development, Poland



“ The Mayors Forum was very well orchestrated, being [of] a good length and content, as well as expertly moderated. It was also useful to integrate this with the smart cities agenda and stands, which were interesting and gave a good insight into future developments. ”

ALDERMAN PETER ESTLIN
Mayor, City of London



“ I think WCS is wonderful. It is always good for people to come back here to refresh your mind, and remember your contribution towards urbanisation and how you can do better in the work. ”

NINA YANG
Chief Executive Officer,
Sustainable Urban Development, Ascendas-Singbridge



“ I think what’s so fascinating is that so many cities are examining and planning for the same challenges. There’s nothing better than learning from examples of what other people are doing. So it’s actually quite inspirational, and I have to support and really give full credit to the Singapore government and the Centre for Liveable Cities for actually bringing this about. ”

LUCY TURNBULL
Chief Commissioner,
Greater Sydney Commission



“ I think WCS is a very well executed summit. I see it as a melting pot for ideas and exchange amongst different experts and fields on master planning, designing, building and integrating smart and sustainable cities. I’m very confident that through such a platform, there will be more innovative ideas and projects that can be brought to bear in time to come. ”

CINDY LIM
Managing Director, Keppel Urban Solutions



“ I think it is an [advanced] step [to] invite mayors around the world to get together here in Singapore. We can learn from one another, share experience among mayors and [also] share best practices with other cities. ”

H.E. DR TRI RISMAHARINI
Mayor, Surabaya



“ The WCS is actually showing it is important to bring all stakeholders together. The city cannot solve [problems] by itself. There are tremendous challenges, and we all have to work together on this. ”

JENNY BOFINGER-SCHUSTER
Senior Vice President,
Sustainability and Cities, Siemens



“ The WCS is a constant source of innovation, learning and, of course, networking with some of the smartest minds in city development across the world. ”

SHAISHAV DHARIA
Regional CEO, Lodha Group

THE WEEK IN NUMBERS



OVER **24,000** PARTICIPANTS



43 HIGH-LEVEL MINISTERS



S\$26 billion BUSINESS ANNOUNCEMENTS

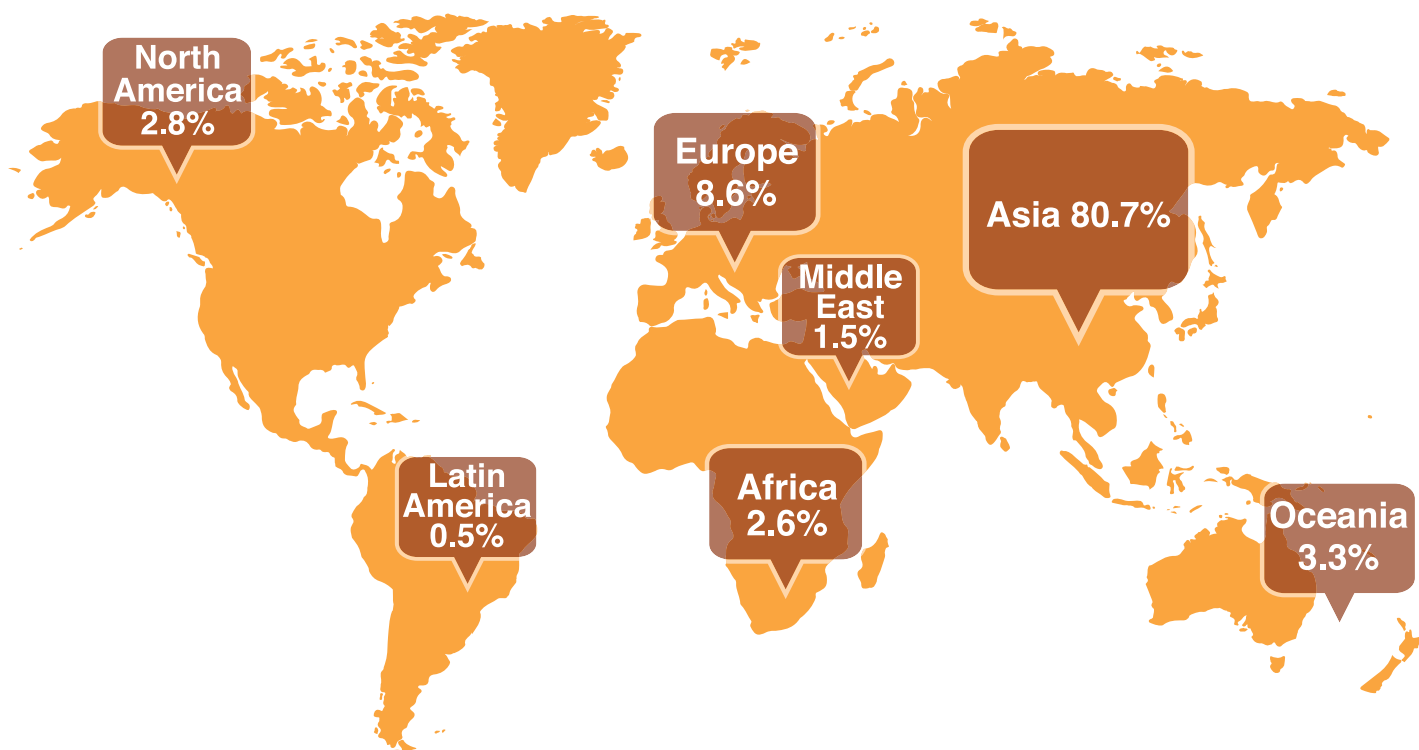


1,100 PARTICIPATING COMPANIES

at World Cities Summit, Singapore International Water Week and CleanEnviro Summit Singapore.

133 MAYORS & CITY LEADERS FROM **128** CITIES AT WCS

REGIONAL BREAKDOWN OF OVER 1,800 DELEGATES AT WCS



SECTIONAL BREAKDOWN OF DELEGATES AT WCS





IN SUMMARY

IN SUMMARY

Liveable & Sustainable Cities: Embracing the Future through Innovation and Collaboration

“How to adapt to what the future might bring, with confidence and openness to change and cooperation”—this spirit was at the heart of the agenda at the 6th World Cities Summit (WCS), held from 8–12 July 2018 in Singapore. More than 1,800 delegates, including 133 mayors and city leaders from 128 cities, gathered to take stock of rising urbanisation around the theme: “Liveable & Sustainable Cities: Embracing the Future through Innovation and Collaboration”. These challenges are gaining urgency in the face of disruptive technologies, and against the backdrop of global issues, including climate change and ageing populations.

The four main conference themes of Governance, Planning, Resilience and Innovation framed the sharing of common problems, best practices and policy options. The WCS, held in conjunction with the Singapore International Water Week (SIWW) and CleanEnviro Summit Singapore (CESS), provided a unique, integrated global platform for government and industry leaders to share solutions for sustainable urban development and the latest innovations in water and clean environment solutions. The three events were attended by more than 24,000 participants, including ministers, mayors, government officials, industry leaders, practitioners, academics, as well as representatives from international organisations.



LEE KUAN YEW PRIZE

2018

AWARD CEREMONY & BANQUET





Networking opportunities to forge meaningful connections.



Site Visit to Gillman Barracks.

Working Together is More Important than Ever

As the world's dominant demographic and economic clusters, cities were urged to take the next step up to address current major urban issues by partnering with public and private sector agencies in a more integrated way than before. Not every local government will be able to do what the state of Andhra Pradesh is doing—integrating a city's key urban systems while building Amaravati, a brand-new state capital, from scratch. But cities can work towards tackling urban, water, environment and transport management issues together, along the lines of what Singapore is trying to achieve by enhancing its stewardship of water, waste and energy as an integrated whole with upcoming infrastructure like the Tuas Nexus, where circular economy principles such as more intensive reuse and recycling will also be implemented. To pay for all the works that need to be done, cities will also have to be innovative with their financing options. They can pick up tips from other cities, from Antwerp to Pittsburgh, to enhance old revenue sources and discover new ones.

Disruptive Technologies: Boon or Bane?

Disruptive technologies were in the spotlight at this year's Summit, highlighting the transformative changes they can bring to almost all aspects of society, including new modes of business, communication and transport, not to mention industry churn and job losses, and the re-skilling of the workforce. New technologies will equip cities with new resources, like the "Virtual Singapore" 3D digital model that will change how planning is done. "Virtual Singapore" will aid planners in mapping out barrier-free routes for the elderly, and involve the private sector and people in planning industrial estates. Big data, artificial intelligence, autonomous vehicles and other new forms of digitalisation also threaten to disrupt societal structures and human relationships. Computer training centres in Surabaya and biotech farms across Thailand may just be the beginning of adaptation to these new trends in the economy and society.



WCS Young Leaders Symposium.

From “3P” to “4P” for Greater People Participation

Since its first edition in 2008, a major recurrent theme of the WCS has been the importance of cities being more ‘people-centric’. This year, this call was further advanced with the proposal to add a fourth “P” (people) to the familiar term “3P” (public-private partnership) in the lexicon of liveable cities. Such advocacy for greater people participation is aligned to global trends such as the rise of an increasingly active and vocal citizenry. As urbanisation continues apace globally, cities are no longer just centres of commerce, industry and political power. They also serve as homes and havens to increasingly diverse communities.

Hence, in addition to the familiar physical and environmental aspects of society, urban resilience will increasingly become more important and play a greater role in influencing the health and physical wellbeing of residents. For example, sports will be promoted as a way to improve the health of a rapidly ageing population. With a different mindset, approaches in policy formulation and amenities provision will evolve, ranging from using GPS-enabled snow excavators to extricate the elderly

in Toyama, to providing free reading glasses for all seniors in New Taipei City. What this all means for cities is to engage and involve citizens even more, perhaps even as far as Bilbao is doing, with citizen participation in formulating, and endorsing, an agreed set of values that the city will stand for.

Innovation and collaboration towards integrated solutions also has important soft aspects. Nature must be in the equation from the start in a new ecology of urbanisation for all cities, even though it is likely to be more keenly felt in cities like Panama City that are fringed by oceans and nature. The rejuvenation that nature can bring is exemplified by cities like Seoul, the 2018 Lee Kuan Yew World City Prize laureate, in measures such as renewing and turning old streams into recreational nature spots for everyone to enjoy. As for culture, more collaboration will help foster a sense of common identity, belonging and a shared future. As a city like Adelaide demonstrates through its heritage and culture initiatives—such as funding creative industries and commissioning public art—culture forms the very foundation for the public, private and people sectors to work together to innovate and collaborate to create more sustainable and liveable cities.

KEY INSIGHTS

>> PLAN FOR DISRUPTION

To address technological disruptions, cities should enhance their planning and urban governance approaches to meet the urgent need for innovation, and even to reorganise society in some ways.

>> COLLABORATE WITH CITIZENS

Citizen participation and collaboration with the government is now more vital than ever to harness the benefits of digitalisation and to implement urban solutions in a more integrated way.

>> ALLOW SPACE FOR INNOVATION

To nurture a societal culture of experimentation and reinvention, city governments should engage, and allow more space to citizens and entrepreneurs.

>> A NEW PARADIGM FOR RESILIENCE

To enhance resilience, especially social resilience, cities need a new planning paradigm for a more people-oriented city, which includes citizens across the socio-economic spectrum.

>> REVAMP INFRASTRUCTURE FINANCING

Cities can seek out innovative new ways to extract revenue and value from what they already have, and also look to other cities for ideas to finance the infrastructure they need.

>> INVEST IN CULTURE AND NATURE

Harnessing a city's assets, especially culture and nature, can add much to its capacity for resilience and for collaboration to boost sustainability and liveability.



PLENARIES



OPENING ADDRESS

H.E. THARMAN SHANMUGARATNAM

Deputy Prime Minister and Coordinating Minister for Economic and Social Policies, Singapore

OPENING ADDRESS

“ There is immense opportunity to learn from each other, to ensure a more sustainable environment, effective investments in human capital, and urban planning that encourages cohesive rather than segregated communities. ”



“ Beyond making the most of technology, it is also critical that we empower communities and develop the social capital that helps ensure that urban innovations have broadly felt benefits. ”

“ We have much to learn from each other. Between countries and cities rich and poor, and between the public and private sectors, the community and civil society. ”

KEYNOTE ADDRESS

“ With the growth of megacities, we must reconsider the structures of our local governments. ”

H.E. RANIL WICKREMESINGHE

Prime Minister, Sri Lanka



Artist impression of Colombo Port City, which is being developed into an offshore financial centre.

Source: CHEC Port City Colombo (Pvt) Ltd. - <https://www.facebook.com/PortCityLK/>.



KEYNOTE ADDRESS

H.E. RANIL WICKREMESINGHE

Prime Minister, Sri Lanka



MODERATOR

TOMMY KOH

Ambassador-at-Large,
Ministry of Foreign Affairs,
Singapore



Parts of the sea off Colombo's Galle Face Green are being reclaimed to build Colombo Port City and new access routes. Source: Dhammika Heenpella / Flickr - <https://flic.kr/p/TdC9Av/>, CC BY-NC 2.0.

KEY INSIGHTS

- 1. Asia has much work to do.** Asia needs to deal with issues arising from rapid urbanisation, including pollution, overcrowding, ageing and access to adequate funding.
- 2. There are good models to adopt.** Government-to-government links can facilitate implementation of successful practices from abroad. For example, Singapore helps Sri Lanka to enhance its liveability with measures to improve its physical infrastructure.
- 3. The public sector should open up.** Sri Lanka is drafting new laws to streamline the processes for development, procurement and outsourcing. More projects will be identified for public-private partnerships.





From Left to Right: Zhuang Guotai, Prof Chan Heng Chee, Steven Demetriou, H.E. N. Chandrababu Naidu, Kristalina Georgieva, Bernard Charles and H.E. Dr Thani Bin Ahmed Al Zeyoudi.

OPENING PLENARY

Cities have become the world's dominant demographic and economic clusters, and we are seeing the rise of "megacities". Increased urbanisation, rising demand for resources and climate change will inhibit many cities' potential to be engines of progress and prosperity. How should urban, water, environment and transport management evolve to keep pace with urbanisation?

KEY OBSERVATIONS

1. Mindsets are shifting everywhere.

Government efforts at public education are bearing fruit. People across the world are adapting to sustainability measures and are adopting eco-friendlier behaviours.

2. Technological advancements are making real impact everywhere. Research suggests that the world is very close to eliminating the technology gap between the virtual and the real in terms of what technology can monitor and measure in the real world.

3. Solutions have gone global. Globalisation allows global urban solutions to resolve problems around the world more easily, bringing about significant social impact. New technologies help to solve problems such as flood protection in the face of climate change.





MODERATOR

PROF CHAN HENG CHEE

Ambassador-at-Large, Ministry of Foreign Affairs, Singapore

SPEAKERS



“What makes me most optimistic about the future are the bottom-up energies from cities, led by mayors...on the ground, we are putting our best foot forward.”

KRISTALINA GEORGIEVA

Chief Executive Officer, The World Bank Group



“Technology will give you so much advantage, but only if you use it properly, such as with cost-effective innovations.”

H.E. N. CHANDRABABU NAIDU

Chief Minister, Andhra Pradesh



“Managing complexity is about making sure that all stakeholders see the same thing.”

BERNARD CHARLES

Vice-Chairman and Chief Executive Officer,
Dassault Systèmes



“Strong government, appropriate laws and technological support are needed for sustainability measures to be effective.”

ZHUANG GUOTAI

Vice-Minister,
Ministry of Ecology and Environment,
People's Republic of China



“Environmental problems are similar across the world, but the paths towards solving them differ widely depending on environmental, economic and socio-political variables.”

STEVEN DEMETRIOU

Chairman and Chief Executive Officer, Jacobs



“What's moving is that mindsets are changing all over the world.”

H.E. DR THANI BIN AHMED AL ZEYUODI

Minister of Climate Change and Environment,
United Arab Emirates

WCS PLENARY: IS COLLABORATION THE PANACEA FOR LIVEABLE AND SUSTAINABLE CITIES OF THE FUTURE?

The WCS Plenary rounds off the discussion sessions of the day by pulling together the insights and best practices in governance, planning, resilience and innovation, with a focus on the development of liveable and sustainable cities for the future. In today's world, where the only constant is constant change, cities are the sources and centres of innovation. Better people-public-private collaboration is key to providing an enabling digital environment to support growth, without stifling innovation, and ensuring that people are not left behind amidst the fast pace of globalisation and urbanisation. While challenges from social unrest, environmental deterioration and economic stagnation are inevitable, city leaders can translate plans into reality through good urban governance, prudent financing approaches and piloting of innovations.

KEY OBSERVATIONS

1. Collaboration is the only way forward.

Cities can grow well sustainably only if government, businesses and citizens collaborate effectively on projects. The Greater Sydney Commission is an umbrella body that coordinates over 20 government agencies and departments of New South Wales. Cities need to collaborate for implementation, but also at a higher strategic level that involves learning from other cities and partnering multinational companies to scale up projects. At the community level, local councils must work in alignment with the private sector and communities to address issues of housing, transport connections, jobs, health services, and education and training.

2. Build for the people and for society.

Cities should focus on bankable projects that touch, both, the physical infrastructure and social aspects. For example, Vientiane's Sustainable Urban Transport Project not only works to improve transport connectivity, it also helps to address social issues such as gender equity by making it easier, cheaper and safer for women to travel to work.

3. Distribute development well. Cities should look at how to distribute amenities and infrastructure within cities, between urban areas, and between urban and suburban areas. For developing cities, there is the additional challenge arising from the informal economy. It is difficult to apply new technologies because such economies are typically built upon basic infrastructure.

CONCLUSION

A good city requires integrated planning based on a clear sense of the best bankable projects that maximise benefit to the society; a good distribution of developments across the city; collaboration between the public, private and people sectors; and learning from other cities. Only then can good urban governance meet the people's immediate needs, and also serve the longer-term wellbeing of society. In less developed countries, where the infrastructure is more basic, more targeted initiatives may be needed to distribute the benefits of development more evenly.

From Left to Right: Bambang Susantono, Peter Bakker, Lucy Turnbull, Dr Liu Thai Ker, Peter Ho and Prof Geoffrey West.





MODERATOR

PETER HO

Chairman of Urban Redevelopment Authority and former Head of Civil Service, Singapore

SPEAKERS



“ We are a lean, mean collaborating machine; it's the only way. ”

LUCY TURNBULL

Chief Commissioner,
Greater Sydney Commission



“ Collaboration is necessary but not sufficient; we have to have a more integrated process in urban planning. Coordination is unavoidable. We have to think in many dimensions. ”

BAMBANG SUSANTONO

Vice President,
Knowledge Management,
Asian Development Bank



“ What cities need, most of all, is to work together on a strategic level—multi-cities, multi-companies, multi-themes—to really get scale and speed in implementation. ”

PETER BAKKER

President,
World Business Council
for Sustainable Development



“ We need to develop a ‘science of cities’—a more quantitative, cognitive, predictive, computational framework for understanding cities. ”

PROF GEOFFREY WEST

Distinguished Professor and Past
President, Science Board, Science
Steering Committee, Santa Fe Institute

SUMMARY



“ We must develop capacity to share the same vision, to know what to do with those visions. We must come to some agreement so we can translate visions into plans. ”

DR LIU THAI KER

Chairman, Centre for Liveable Cities



LEE KUAN YEW WORLD CITY PRIZE



“ Engaging the citizens actually reduces the time it takes for us to make and execute decisions. If city governments do not listen to citizens during the planning process, there will be more mistakes made through the trial-and-error approach. ”

H.E. PARK WON SOON
Mayor, Seoul

LEE KUAN YEW WORLD CITY PRIZE LECTURE

The Prize Lecture is one of the key highlights at the World Cities Summit. Delivered by the the mayor of the Laureate city, it celebrates the Laureate’s achievements in the creation of liveable, vibrant and sustainable urban communities with a high quality of life.



PRIZE LECTURE

H.E. PARK WON SOON
Mayor, Seoul



MODERATOR

DR CHEONG KOON HEAN
Chief Executive Officer,
Housing & Development Board,
Singapore, Chairman of the
Lee Kuan Yew World City Prize
Nominating Committee



Dr Cheong Koon Hean and H.E. Park Won Soon.



2018 LEE KUAN YEW WORLD CITY PRIZE LAUREATE: SEOUL

Seoul is recognised as the role model for megacities with a will to change. With a leadership that dares to make bold decisions and a government that devises innovative problem-solving methods, Seoul has successfully turned itself around from a bureaucratic top-down city with rising tensions between the government and its people, into one that is inclusive, socially stable and highly innovative. With its successful and impactful high quality projects to repurpose urban infrastructure, Seoul has proven itself to be an excellent example of a city where leadership, commitment to citizen engagement, data-supported problem-solving decisions, and creative designs can transform the built environment, add vibrancy and improve quality of life.

KEY INSIGHTS

1. Prioritise citizens' wellbeing.

Seoul's urban regeneration projects prioritise the welfare and wellbeing of its inhabitants.

2. Engaging citizens pays off.

Investing time to engage citizens in the shaping of their city has to be balanced against the speed of decision-making for urban development projects.

3. Stay true to the city's soul.

The soul of a city can be retained while fulfilling the pragmatic needs of city planning and management. New infrastructure will always be needed, but cities should not just keep building them. Instead, cities should try to find new solutions or alternatives to building new infrastructure, such as acquiring existing buildings and transform them for new uses.



City Leaders of the 2018 Special Mentions with the Moderators and J Y Pillay, Chairman of the Prize Council (2nd from left).

LEE KUAN YEW WORLD CITY PRIZE FORUM

The Lee Kuan Yew World City Prize Forum is a dedicated platform where the Special Mentions—Hamburg, Kazan, Surabaya and Tokyo—shared their insights and diverse urban development experiences as case studies for cities around the world.



MODERATORS

PROF MARILYN JORDAN TAYLOR

Professor of Architecture and Urban Design, University of Pennsylvania

WONG MUN SUMM

Co-Founder, WOHA

SPEAKERS

PROF JÜRGEN BRUNS-BERENTELG

Chief Executive Officer, HafenCity Hamburg GmBH

DARIA SANNIKOVA

Director, Municipal Budgetary Institution, Kazan Committee for Tourism

H.E. DR TRI RISMAHARINI

Mayor, Surabaya

JUNKO INOKUMA

Vice Governor, Tokyo Metropolis

Hamburg successfully rejuvenated its waterfront. Source: Maxim Schulz – www.mediaserver.hamburg.de.



HAMBURG

Hamburg successfully regenerated the underused parts of its harbour while respecting its built heritage. The urban transformations created a sustainable transport system through car-lite strategies and regained more public spaces for everyone's enjoyment. The city also tackles problems of optimal social integration and income inequality.

“ We are experimenting with driverless electric buses...We think it's not good to have a system that makes streets more and more crowded. ”

PROF JÜRGEN BRUNS-BERENTELG

Chief Executive Officer, HafenCity Hamburg GmBH



Hamburg created a Sustainable Transport System through car-lite strategies. Source: Christian Spahrrieb – www.mediaserver.hamburg.de.





Kazan Kremlin, a UNESCO World Heritage site. Source: City of Kazan.

KAZAN

Kazan recognises that its people are the city's most valuable asset and has invested strategically in sports, medicine, nutrition and family life to improve overall quality of life. Kazan is the first Russian city with an intelligent public transportation network providing comfort for the elderly and the disabled through low-floor access trains.

“The city works closely with the people. Kazan's 25 parks would not have come about without the opinions and ideas of our citizens.”

DARIA SANNIKOVA

Director, Municipal Budgetary Institution,
Kazan Committee for Tourism



Kazan Arena. Kazan successfully branded itself as the sporting capital of Russia. Source: City of Kazan.



Greening the Kampung: 20% of Surabaya land area is covered by green spaces. Source: City of Surabaya.

SURABAYA

Surabaya works to improve the welfare and wellbeing of all inhabitants through initiatives like slum rehabilitation programmes, free ambulance services, waste management and increased street lighting to enhance public security. Surabaya encourages urban farming, helps small businesses with brand-building and citizens to gain new digital skills to reduce income inequality.

“ From 5 a.m. every day, I’m out and about communicating directly with citizens...Even young people can submit proposals directly to the mayor. ”

H.E. DR TRI RISMAHARINI

Mayor, Surabaya



Kampung Unggulan (Prominent Kampung) and Pahlawan Ekonomi (Economic Heroes) programmes aim to promote home-based entrepreneurship.

Source: City of Surabaya.



TOKYO

The integration of Tokyo's railway network with the daily lives of its inhabitants greatly promotes social inclusiveness. This holistic gentrification-by-rail strategy was realised through collaboration with various railway corporations. In preparation for an ageing population and the 2020 Olympics Games, Tokyo is stepping up its barrier-free efforts to promote inclusiveness.

Strong public-private partnerships enable the Tokyo Metropolitan Government to tap on the expertise of the private sector for urban improvement projects. Source: Tokyo Metropolitan Government.

“Tokyo Olympics 2020 is regarded as an opportunity to show the world an example of a mature city.”

JUNKO INOKUMA

Vice Governor, Tokyo Metropolis



Tokyo Metropolitan Government and the private sector continually invest in public transport to ensure train efficiency and reliability. Source: Tokyo Metropolitan Government.

LEE KUAN YEW WORLD CITY PRIZE 2018 LAUREATE

SEOUL REPUBLIC OF KOREA



Madam Halimah Yacob, President of Singapore, presenting the Lee Kuan Yew World City Prize to H.E. Park Won Soon, Mayor of Seoul.

LEE KUAN YEW PRIZE AWARD CEREMONY AND BANQUET

The Lee Kuan Yew Prize Award Ceremony and Banquet celebrated the winners of the Lee Kuan Yew World City Prize and the Water Prize. President of Singapore, Madam Halimah Yacob, was the Guest-of-Honour.





WCS MAYORS FORUM



9th WCS MAYORS FORUM

Two pressing global needs topped the agenda of the 9th World Cities Summit (WCS) Mayors Forum: embracing disruptive innovations and financing infrastructure. Held in Singapore and attended by 124 mayors and city leaders from 119 cities, the Forum explored how liveable cities could learn and adopt new technologies, and find more funding sources to finance infrastructure projects.

Are Cities Ready for the Fourth Industrial Revolution?

The current pace and scale of urbanisation require all cities to be ready to embrace new technologies—even cities where familiar problems like road congestion have already been tackled. In Melbourne, vehicular traffic has been mostly managed. But with a fast-growing population, the city now faces the issue of how to streamline its streets to manage massive pedestrian flows. In Amman, these challenges are exacerbated by circumstances such as the influx of refugees, mostly from Syria. The fourth industrial revolution is characterised by disruptive technologies—such

as artificial intelligence, machine learning and the Internet of Things—that are changing the way we live and work. Although they offer new tools to increase our connectivity and productivity, they will also displace old jobs, and even threaten upheavals in human relations.

In today's transformative landscape, cities must reexamine existing forms of governance, planning, citizen involvement and the investment ecosystem. Many challenges abound in integrating disruptive platforms with city services, ranging from transport to healthcare. Stakeholders across all sectors, including the government, businesses and ordinary citizens, would all welcome more space and flexibility to test new business models and float ideas to make city living more efficient and sustainable. Globally, there is a renewed call to embrace innovation with fresh mindsets ready for experimentation and adaptation; to reimagine the city as a living laboratory to try out new ways of building a city.

Co-Creation: More Vital Than Ever

For cities to nurture and embrace innovation, the role of the mayor has to go beyond addressing municipal issues to telling a new and inspiring story about the future of the city, persuading citizens to buy into the benefits of adapting to technological change and participating more in shaping the city's development. With each passing year, the consensus among mayors moves towards an even deeper appreciation of how central the people are to everything that cities do.

A new acronym entered the vocabulary at this year's Forum: "4P", or "Public-Private-People Partnership", adding "People" to the old "3P", or "Public-Private Partnership" idea of government working with businesses on city development projects. In this area of citizen involvement, there is some room to grow. Practices like participatory budgeting (where citizens can vote on a city's spending) are currently practised by a handful of cities. As cities adopt more disruptive innovations, they must also remain inclusive and mindful of those citizens at risk of being left behind by the tides of change. Even cities as developed and highly-ranked on liveability indexes as Vienna are still working on basic needs like keeping housing affordable—for what would a city be if most of its citizens were priced out into the suburbs? Cities

should also do more to integrate aspects such as the natural ecosystem into their development agenda, as is being done in Panama City.

No Investment, No Cities?

If innovation seems abstract, what is certainly concrete is the need to finance new infrastructure, ranging from roads to housing. To boost revenue, cities must reexamine their financing options beyond traditional taxation, adapting to marketplace shifts such as the rise of the virtual economy with new players like online taxi services. A whole new generation of public-private partnerships should involve the people much more, since future projects will no doubt embed elements of disruptive innovations that require from citizens greater user participation in data-generation. As city governments and commercial players enter into closer partnerships, they must work harder to win the trust of citizens so that, together, the city can present a more integrated and attractive case for private sector investment. All these challenges suggest that city governments will have to relinquish some measure of direct control, even as they paradoxically might need to exercise more care over governance and the management of projects over the longer term.



“A city is sometimes seen as a social reactor...that catalyses human connections and aggregates human relationships. That is what good cities do. They provide a platform that maximises social interactions, which maximises human connections.”



LAWRENCE WONG

Minister for National Development, Singapore
Chairman of the WCS Mayors Forum 2018

CITIES AS “SOCIAL REACTORS”

In this way, cities can gather consensus and participation in support of initiatives such as becoming a “smart city”, which is seen as an important organising concept to galvanise different stakeholders and harness technology effectively in building our cities. Forms of digitalisation, such as big data and artificial intelligence, are potential game-changers that can rebuild cities. This is why cities should embrace disruptive innovations in areas including master-planning and visualisation of a city, building greener and more sustainable cities, mobility, delivery of services like e-payments and sensory infrastructure.

Disruptive ideas are needed to inspire cities to rethink the status quo, and for cities to change, progress and flourish. Cities will need to rethink infrastructure financing strategies, including structuring projects in ways that are fair, integrated and valuable in order to attract investors to finance the projects. As a regional financial centre, Singapore can help in many ways, such as by setting up an Infrastructure Asia Office (targeted to open in October 2018), to facilitate more infrastructure projects and partnerships.

DISRUPTIVE INNOVATIONS: A KEY ENABLER FOR GREENFIELD DEVELOPMENTS



H.E. N. CHANDRABABU NAIDU

Chief Minister of
Andhra Pradesh

The challenges of building a brand-new capital city at Amaravati with the help of the Singapore government were highlighted by Nara Chandrababu Naidu, Chief Minister of Andhra Pradesh. “To build a greenfield capital is the rarest opportunity,” he said. The city has set itself ambitious goals,

including topping India’s Happiness Index by 2029 and becoming the world’s best destination by 2050. It will also aim to meet targets including timely emergency responses and enabling most people to walk short distances to work.

Deploying smart technologies and innovation is a vital enabler, including installing smart grids for power, road, water, gas and fibre networks, to reach “100% of the state”. Various financing models are being used in partnership with organisations such as the World Bank and academic institutions such as the University of California, Berkeley.

CITIES IN SMART COLLABORATION

Southeast Asia is coming together in a more concerted way to meet environmental challenges and nurture community resilience. A declaration to take ownership of these issues was signed by mayors from the 10 ASEAN (Association of Southeast Asian Nations) capitals at the 6th Meeting of Governors and Mayors of ASEAN Capitals held in Singapore.



LOW YEN LING

Chairman of the Mayors' Committee, Singapore

Ms Low Yen Ling, Chairman of the Mayors' Committee, Singapore, reported on the discussions around how resilience and innovation can enhance efforts to promote "green living" across the region in essential services such as water and waste management, and in applying technologies such as sensors and smart grids. Platforms such as the recently-formed ASEAN Smart Cities Network comprising 26 ASEAN cities will facilitate the sharing of best practices and innovations.

“What we really want is to see that sense of connection between citizens, between government and people, between businesses and the communities where they serve.”

MELISSA KWEE

Director, Pontiac Land Group
Representative of the WCS Young Leaders Symposium 2018



HOPES OF YOUNG LEADERS: CITIES AS “LIVING LABS”

Cities can become “living labs” that involve entrepreneurs and residents in test-bedding new ideas. This was one key idea from this year’s WCS Young Leaders Symposium, said Ms Melissa Kwee, Director, Pontiac Land Group, who spoke on behalf of the 89 Young Leaders. For example, citizen-generated data and information from informal networks could be applied to areas like

transport to boost efficiency. Learning spaces, or specially protected areas acting metaphorically like playground “sandboxes”, could be created to allow people to try out policy innovations. Small-and-medium enterprises could also be helped with more flexible funding and regulations.



Aerial view of Toyama City. Source: Toyama City.

WCS MAYORS FORUM SESSION 1

WHAT SHOULD MAYORS DO TO EMBRACE AND CAPITALISE ON DISRUPTIVE INNOVATIONS?

Nothing can hold back the “disruptions” brought about by technological innovations. Cities in turn face urgent needs for “hardware” such as building adequate digital infrastructure. They also carry perhaps the even more important “software” reminder, that ensuring the wellbeing of citizens lies at the heart of making cities liveable.

City Governments Can Foster a Culture of Innovation

Smarter planning itself can be a disruptor to galvanise key players to collaborate for sustainable development—such as working together as a “whole-of-government” and avoiding working in silos. Embracing disruptive innovation demands adaptation at all levels—from refashioning “digital city councils” with revamped mindsets, to opening up the imaginations of even the most vulnerable residents to the realisation that innovation is a friend, rather than a threat. Additional complementary actions to nudge behavioural change among citizens and market players is also crucial. In the follow-up, co-creation will be essential to tapping the ideas, skills and resources of the people and of private enterprise.

Roll Out Inclusive Innovative Disruptions in Phases

It is important to retain the perspectives of human scale, happiness and even human values, so that technological innovations stay relevant to and compatible with people’s lives. The new approaches adopted must be fully inclusive in all aspects, including age, gender and income. For example, the e-wallet card in the ageing society of Taichung has multiple uses from paying for public transport to accessing public health and welfare services. Inclusiveness can also take even more targeted, concrete forms like in Toyama, where global positioning system (GPS) technology is used by excavators to find and evacuate elderly residents trapped in heavy snow. In these and other ways, cities must apply technology to bridge the first and last mile and bring innovation closer to residents, at times literally to their doorsteps. Preparing and sharing planning visions with the residents, such as Sydney’s “30-minute city”, allows citizens to appreciate the city planning required to provide citizens easy access to vital services such as healthcare and education. In Muscat, digital initiatives start out as demonstration projects, before being replicated elsewhere in the country.

Cities Embracing More Innovation Must Address Blind Spots Along the Way

Realising the potential benefits of disruptive innovations requires the solutions to be sustainable and financially viable. Some cities may have vast existing resources that are overlooked, which new processes like data-mining can help surface and organise. The new shape of society should continue to prioritise a city's "soft" aspects, including culture and heritage. Amidst active promotion of technological adoption, there is the call from Puente Alto to not forget the "humanising factor" and to ensure solutions remain rooted in humanity. In Bilbao, the city has engaged its residents to come up with 17 stated values of the city in aspects such as social justice and diversity. It is also important to ensure that vital aspects of urban development, such as integrating care for nature and biodiversity, are not forgotten when innovations are rolled out.

Cities Can Plan Ahead to Prepare for Disruptive Innovations

Cities should act now to adjust and prepare for the longer term impact of innovation. Cities should also leverage on alignment of national objectives with their technological agendas to advance specific projects and initiatives. Bangkok's model of developing the city—which has 50 sub-divided districts based on sectoral specialisations ranging from logistics and fintech to cultural heritage—is aligned with the country's "Thailand 4.0" initiative to develop digital capabilities for the fourth industrial revolution. Cities can also do what the city of Casey is doing—working with futurists and academics, and using data and evidence to predict the jobs of the future. The key is to start now, and ensure that citizens are equipped with the right skillsets to be able to work with future technologies.



The City of Casey created an award-winning arts, cultural and entertainment precinct to encourage digital and social interactions. Source: City of Casey.



“The slogan (of Kalasatama's 'green-edge' community) is: 'One more hour a day', and who wouldn't want that extra hour? The goal of smart cities is to give everyone more time and make city living easier.”

NASIMA RAZMYAR

Deputy Mayor, Helsinki



“Technology is one thing, making technology relevant to people's lives is the other. If in cities we're dealing with inclusive development, bringing migrants in with their cultural differences, you can get those sparks of disruption from diversity of thought that will ask the right questions and make technology relevant.”

MARVIN REES

Mayor, Bristol



“Data is the currency of the 21st century, the enabler of the innovation that we're all seeking, the common bond that ties us all together.”

MARTIN HAESE

Mayor, Adelaide

NO INVESTMENT, NO CITIES: WHAT CAN MAYORS DO TO ATTRACT FINANCING FOR INFRASTRUCTURE PROJECTS?

A city's vision, leadership and plans would all count for nothing without the funds needed to turn projects into reality. The existing gap is obvious: Everywhere, infrastructure deficits have surfaced, often delaying or derailing developments in housing, energy, waste management and other essential areas. The accompanying underlying issues include weak fiscal systems in city administrations and lack of political will at the national level.

Meanwhile, the pressures for action continue to mount, with immediate challenges of rapid urbanisation and rising populations, and longer-term challenges of disruptive technologies, ageing population and climate change. As cities seek new forms of innovative financing, governance will remain important and might need to become cleverer and more careful in order to monitor and manage more complicated financing arrangements. In addition, adequate regulation and oversight will be key to safeguarding key facets of public interest, including privacy, safety and equity.

Cities Must Rethink and Revamp the Way They Seek Financing

Fresh approaches and forms of financing are needed for infrastructure projects that involve public and private sector partnerships. As many mayors reach for the financing option they already know—Public-Private Partnerships (PPP)—they also realise that this too might need to be re-imagined. Cities can look to sister cities that are financial centres, like London or Singapore, for innovative new possibilities of what capital markets can do to assist.

City governments will need a better understanding of a city's existing and potential assets—such as natural resources and data—and assess how they can be commercialised to attract even more private sector investment. New forms of direct and indirect taxation could be assembled to expand and generate more municipal revenue, as has been done in places like Pittsburgh, with something as basic as parking charges, or in Antwerp, with real estate permits. Project risk-sharing can be reconfigured, as with the China-Singapore project in building the Tianjin Eco-City, to whet investor appetite with greater confidence in state backing.

Antwerp harnesses innovative technology through the City of Things testbed. Source: Antwerp.





Essen promotes green infrastructure for sustainability. Source: Essen.

A New “P” to Make It “4P”: People Can Play a Bigger Role in Projects

More than one mayor called for a paradigm shift from “3P” to a new-generation “4P”, with “People” being added as a fourth “P” to “Public-Private Partnerships”. This reiterated a major theme of the Forum, which was that city governments must include citizen participation much more than before. This is so for several reasons, not least that the fourth industrial revolution is digital, with big data relying increasingly on citizen-generated information and requiring residents to make large-scale behavioural shifts. Public communication will also need to be enhanced so that citizens can see the social benefits of projects, whether it is a new bicycle highway in Essen, or a multi-storey carpark in Thimphu. A further idea from Penang was to add a fifth “P”—“Professionals”—calling for more trust in what experts can offer with their seasoned technical knowhow and ground experience.

City Governments Can Share Leadership of Projects

To get underway with more effective infrastructure financing, city governments should allow other players to take on more leadership. Cities must accept that sometimes their role is that of a partner rather than the project lead. Borrowing a football metaphor used by Fortaleza, sometimes the government needs to play the role of a midfielder rather than a striker or captain.



“ Nobody innovates like the private sector. Municipal governments cannot do this alone. ”

STEPHANIE VON FRIEDEBURG

Chief Operating Officer,
International Finance Corporation,
World Bank



“ We need a new compact: The “4P”—Public-Private-People Partnership—aligning and working together to make our cities work and become more sustainable. ”

DATO' MAIMUNAH BINTI MOHD SHARIF

Executive Director, UN-Habitat



“ The fifth “P” is actually “Professionals”: We always allocate a session every month with professionals to think of solutions to implement what the people want. ”

YEW TUNG SAENG

Mayor, Penang

CITIES MUST ALWAYS BE READY TO RETHINK THE STATUS QUO, PLAN AHEAD AND WORK TOGETHER, BOTH, WITH THEIR CITIZENS AND OTHER CITIES.



The next edition of the WCS Mayors Forum will be held from 10–12 July 2019 in Medellín, Colombia.



SUMMARY OF KEY TAKEAWAYS FROM WCS MAYORS FORUM 2018:

Rethinking The Status Quo

Disruptive innovations are a key enabler for greenfield developments
City governments can foster a culture of innovation
City governments can share leadership of projects
Cities must rethink and revamp the way they seek financing
Cities can act as “Social Reactors”
Cities can become “Living Labs”

Planning Ahead

Cities can plan ahead to prepare for disruptive innovations
Cities must roll out inclusive innovative disruptions in phases
Cities embracing more innovation must address blind spots along the way

Working Together

Cities can collaborate to become smarter
A New “P” to Make It “4P”: People can play a bigger role in projects

CITY PORTRAITS

City Portraits showcases the participating cities of the Mayors Forum, including some of their city-wide initiatives and projects that have been successfully implemented.



Scan to download the complete
“World Cities Summit 2018 City Portraits” e-publication.



WCS YOUNG LEADERS SYMPOSIUM

WCS YOUNG LEADERS SYMPOSIUM

In partnership with Temasek Foundation Connects

This year's Symposium focused on innovation and disruption in the public, private and people sectors. The session began with the opening address by World Cities Summit Young Leaders Chairperson, Minister for Social and Family Development and Second Minister for National Development Desmond Lee, and welcome remarks by WCS Young Leaders Partner, Temasek Foundation Connects' Chief Executive Officer, Lim Hock Chuan.

Selected Young Leaders then shared how they harnessed innovation in their areas of expertise. This was followed by three rounds of group discussions, and a round of sharing by a second group of Young Leaders.



CHAIRPERSON

DESMOND LEE

Minister for Social and Family Development and
Second Minister for National Development



MODERATOR

PANG YEE EAN

Director General, Investment Operations,
Asian Infrastructure Investment Bank

SPEAKERS



“ How do you change the character and complexion of a city? ”

THOMAS KUFEN
Mayor, Essen



“ How do you gather reliable, relevant and actionable feedback from a city's residents? ”

PROF CARLO RATTI
Director, MIT SENSEable City Lab



“ How do you bring cash-strapped SMEs up to date on the newest technologies and innovations? ”

TED CHEN
Co-Founder, Evercomm



“ How might you best map a city's formal and informal transport routes? ”

DEVIN DE VRIES
Vice-Minister, Co-Founder, WhereIsMyTransport



“ How do you gauge exactly how people feel about being in a particular city? ”

LUCINDA HARTLEY
Co-founder and Chief Impact Officer,
Neighbourlytics



“ How do you make a city's residents want to walk about its streets? ”

CHINTAN RAVESHIA
Cities and Transit Development Leader, Arup



“ How do you bring back a country's native flora and fauna to its cities for good health, increased tourism numbers and higher property values? ”

JUSTIN LESTER
Mayor, Wellington



“ How do you build a smart and inclusive city from scratch? ”

SHAISHAV DHARIA
Regional Chief Executive Officer, Lodha Group

KEY OBSERVATIONS

Working with partners not only enables constant innovation, but also innovation at scale. Allan Lai, co-founder of Teapasar, suggested a technology platform for companies of all sizes. Smaller, more agile companies would use the platform to showcase their capabilities and innovative ideas that larger companies, government agencies and non-governmental organisations can tap. Shaishav Dharia touched on how to innovate at scale, using the example of how Palava is being built and managed with the help of other developers.

Working with people. People are the core of cities. As Devin de Vries shared, people carry physical data that can be used to map formal and informal transport routes to navigate through cities. Lucinda Hartley provided interesting insight on people's real-time social data can inform urban planning. Prof Carlo Ratti explained how his concept of living labs will allow city dwellers to learn about and experiment with new ideas and technologies, and ultimately provide feedback on the sort of city they want to live in.

Thus, the success of any plan depends on how people respond to it. Chintan Raveshia highlighted how designing for people such as providing after-cycling facilities will encourage active modes of commuting even in unfavourable climates. Tan Eng Kiat, Principal Planner and Manager for Urban Planning and Design (South-East Asia), Surbana Jurong P/L built upon this and suggested that skyparks and underground links could be further enlivened and connected, to safely and comfortably accommodate pedestrians and cyclists.

Inclusivity is key. Stephen Yardwood, Urban Futurist at City2050, suggested providing mobile phones to those unable to afford them, to ensure the comprehensive mapping of informal travel routes. Tobias Puehse, Vice President and Business Leader: Innovation Management at Mastercard, pointed out that an inclusive platform can have knock-on effects such as forging a national digital identity.

Taking risks. Innovation is never without its risks. Justin Lester shared how Wellington went against traditional cost-benefit analyses to preserve and promote New Zealand's indigenous Maori culture and ancient wildlife, flora and fauna. Thomas Kufen described how Essen underwent a makeover in its character and urban landscape in a matter of years, enabled only by the people's ability to embrace disruption. Tan Szue Hann, Head, Sustainable Urban Solutions and Principal Architect at Surbana Jurong P/L, emphasised how education, focusing on the history of cities and appreciating diverse cultures, is key to nurturing citizens to be open to change.

Last but not least, cities should be made to embrace innovation and disruption. Pablo Viejo pointed out that cities should take a light regulatory approach to Prof Ratti's living labs as well as "sandboxes" in areas of the city, to allow companies to conduct experimentation and for people to experience them.

Minister Desmond Lee summed up this point as well as the Symposium in his closing remarks as Chairman: "Be bold, experiment in situ, accept failure and be attuned to political risks".



“ One of the city’s greatest strengths is its ability to change. ”

THOMAS KUFEN

Mayor, Essen, Germany

“ Starting and driving an innovation is simple. The real challenge is sustaining that innovation in the face of society’s resistance to change. ”

TED CHEN

Co-founder, Evercomm

“ We need constant feedback from residents...we can get this not just from what they say, but from how they behave and act within the city. ”

PABLO VIEJO

CEO, PTGem Ltd and CTO, V&V Innovations P/L



WCS Young Leaders at Urban Ventures X, an extension event hosted by Lorezo Petrillo, Lope Lab. The event was supported by Temasek Foundation Connects.



Young Leaders Anupam Yog, Sarah Ichio and Lorenzo Petrillo in a firechat session at Prive@ACM, a post-Symposium event co-hosted by Anupam and WCS Young Leaders, supported by Temasek Foundation Connects.

“ In championing walkability and designing urban mobility, [we should] consider the caregivers for the young, the old and the infirmed... ”

YAO CHING-YU

Advisory Officer and Executive Secretary for International Affairs Advisory Council, the Taipei City Government

“ Involve a city’s residents...in city councils and city development committees. We have found that residents better appreciate the problems and concerns we face in city development. ”

SHAISHAV DHARIA

Regional Chief Executive Officer, Lodha Group



THEMATIC TRACKS



URBAN GOVERNANCE SESSION 1

CAN GOOD GOVERNANCE PREPARE CITIES FOR DISRUPTIVE INNOVATIONS?

With an increasingly volatile and uncertain global environment, public leadership will need to adapt quickly to fast-changing circumstances. Exacerbated by an increasingly active and vocal citizenry, it is critical for governments to be pragmatic, lead with a clear vision and collaborate with the private and people sectors to co-create solutions for a more liveable city. Is good governance alone sufficient to provide the right foundation for plug-and-play of disruptive technologies?

KEY OBSERVATIONS

1. Practice citizen-centric governance.

Smart City initiatives bring many benefits to citizens, including technologies that enhance decision-making to reduce threats such as traffic accidents and crime. Some of these innovations require citizen inputs through user-generated data. To sustain citizen participation, cities can adopt measures including decentralisation, participatory budgeting and concerted efforts to promote local identity. To foster this, Bilbao involves its citizens to craft a set of shared values that the city stands for. These values will make citizens feel more accountable in shaping their own city, inspiring further participation in the future.

2. Welcome diversity to boost innovation.

Embracing diversity is vital to how cities like Bristol boost innovation. The capacity for re-invention comes from diversity, including promoting multiculturalism and welcoming the questioning of the status quo. This enhances the resilience of a city, enabling it to manage changes better. Being in closer touch with diversity will also give city governments a stronger mandate to achieve more.

3. Share more risk and responsibility.

Cities can deal with disruptive innovations better if the public and private sectors share risks to a greater degree. New Smart City projects that involve the private sector as co-investors can be better integrated to bring more long-term benefits. To facilitate this, government procurement processes should change to enable companies to co-invest in disruptive innovation projects that are much more complex and require longer-term partnerships with the private sector. The Punggol Digital District in Singapore is a good example of integrating digital solutions with the physical infrastructure.



MODERATOR

DR TAN CHIN NAM

Senior Corporate Adviser and Former Permanent Secretary

SPEAKERS



“ We want to start with values, then people, and only then to go into technological tools, because technology is a tool. ”

GOTZONE SAGARDUI

Coordinating Councillor for the Mayor's Office, Economic Development and Good Government, Bilbao



“ A Smart City gives us the chance to decide how safe, green and congested do we want our city to be? Digital solutions allow us to do it now. ”

DR JONATHAN WOETZEL

Director and Senior Partner, McKinsey Global Institute



“ Our ability to cope with change—social or economic—is tied up with our sense of self, of what's the story I'm a part of? ”

MARVIN REES

Mayor, Bristol



“ The best solutions usually require an interface of technology, commercial capability, operational concepts and appropriate policies. ”

CHEW MEN LEONG

Chief Marketing Officer, Singapore Technologies Engineering



“ You can't possibly know everything about technology. We create flexible and malleable frameworks so cities can be proactive and responsive to shape change. ”

GABE KLEIN

Special Venture Partner, Fontinalis Partners



URBAN GOVERNANCE SESSION 2

LET'S TALK ABOUT MONEY: HOW WILL CITIES OF THE FUTURE BE FINANCED?

Financial resources are the crucial ingredient to turn masterplans into reality. In recent years, the master developer approach and public-private partnerships have provided cities with alternative financial resources to develop and rejuvenate themselves. New financial institutions are set to catalyse changes to modern urban investment strategies. How can city leaders work better with investors, capital markets and stakeholders to tap into innovative resources and alternative models of urban financing and investment?

KEY OBSERVATIONS

1. Involve the private sector early.

To finance major projects, it is important to partner with corporate players from the initial stages. Involving the private sector early allows companies to prepare in advance and helps to create economic opportunities for citizens. The financing model of Amaravati, the new state capital of Andhra Pradesh, is for the government spend a set amount, and then for private developers to take responsibility for city development. The government did not need to acquire land. Instead, farmlands were pooled and returned in part to the farmers, making them partners and beneficiaries of the project.

2. Ensure transparency and predictability.

Transparency is the key to unlocking private investment, especially for large-scale projects like Iskandar Malaysia. City governments need to step up and take full responsibility for political risks, as this will affect investor confidence in a project. Risk can never be eliminated, but it can be managed better.

3. Find ways to monetise public benefits.

In the past, cities earned revenue from taxing corporate, property and personal incomes. Today, technology may have changed this formula. Technology drives efficiency and brings public benefits. It also makes it harder for cities to impose taxes in the old ways. Cities built elevated corridors (e.g. Skygarden in Seoul and the High Line in New York City), which help reduce traffic congestion, accidents and risks in the insurance sector. The question is: How are such savings and costs measured? A future challenge for governments will be how to anticipate the possibilities of new technologies and figure out how to monetise the benefits they may bring.



MODERATOR

PANG YEE EAN

Director General,
Investment Operations,
Asian Infrastructure
Investment Bank

SPEAKERS



“ The Polish Parliament has adopted some changes for the act on public-private partnership. We very much count on this to bring in more private financing to urban development. ”

JERZY KWIECIŃSKI

Minister, Investment and Economic Development,
Poland



“ Government intervention in the early stages of development is to ensure that money spent will make the region more attractive for wealth to be generated from within or from investment. ”

DATUK ISMAIL IBRAHIM

Chief Executive Officer,
Iskandar Regional Development Authority



“ Cities that put people and the future of work first will be the most investible places in the long term. ”

SEAN TOMPKINS

Chief Executive Officer,
Royal Institution of Chartered Surveyors



“ We have a new economic model based on trust and partnership, a ring-fenced business entity...all components of the development, including land, financing and infrastructure, are outsourced. ”

DR SREEDHAR CHERUKURI

Commissioner, Capital Region Development
Authority, Government of Andhra Pradesh



“ It's about getting the right risk reward, making sure there's appropriate transparency, and balancing that with the time, effort and cost needed to participate in the bidding. ”

STEWART UPSON

Managing Partner, Infrastructure, Asia Pacific,
Brookfield Asset Management



“ The challenge to governments in the future is how to monetise benefits from technology such as efficiency gains in areas like health and safety? ”

MICHAEL P.M. SPIES

Senior Managing Director, Innovation,
India and New Market



“ The financing technique we're using is partnering with the city and district to issue bonds where interest on the loan is paid for by a slight increase in property tax. ”

SIMON TREACY

President, Hawaii, The Howard Hughes Corporation



PLANNING SESSION 1

THEY SAY “OLD IS GOLD”, BUT IS IT REALLY? URBAN REGENERATION THROUGH INTEGRATED PLANNING

Cities are complex entities consisting of multiple urban systems. The various urban systems need to be coordinated with one another through an integrated urban plan to create liveable outcomes and to sustain quality of life for citizens. Integration of social, economic and environmental considerations into planning efforts is required to rejuvenate distressed urban areas in a holistic manner. How can the use of innovative technologies and systems help governments make more informed planning decisions?

KEY OBSERVATIONS

1. Create a bankable investment environment.

Cities can make development projects more bankable with holistic adjustments catering to the different needs of urban and rural growth. In Jilin, plots of farm land were combined to allow for collective farming and new agricultural technologies. The integrated township brought enough population base for the local government to provide better living conditions and opportunities. City governments should enable the private sector to be more flexible within a stable and more investor-friendly regulatory environment.

2. Earn public buy-in.

Cities should always engage citizens, especially on major projects, to balance economic development

with citizens' interests. In Victoria Harbour, Hong Kong, a harbourfront commission was set up to break silos between public agencies to address public protests and protect heritage against new harbour developments by imposing stricter planning guidelines. Budapest allows for ground-up urban regeneration in collaboration with local communities, with the city government giving subsidies for community-led development projects. Corporations can also do their part with adaptive reuse that is sensitive to the surroundings. Singapore's OUE Downtown development has a social kitchen for corporate activities and a public access passageway to the subway station.

3. Consider “car-lite” regeneration.

Technology is not always the best solution. Autonomous vehicles and drones are technological innovations that may not be good for cities in every way. Cities of the future need a new planning paradigm to re-orientate urban regeneration towards creating more liveable and sustainable cities through healthy and elderly-friendly aspects. Cities like Copenhagen and Melbourne take a people-oriented approach to improving the quality of life by encouraging more walking and cycling. This reduces traffic congestion and pollution. With more exercise, there is better health and wellbeing, as well as more social interaction and cohesion.



MODERATOR

PROF MARILYN TAYLOR

Professor of Architecture and Urban Design, University of Pennsylvania

SPEAKERS



“ One of the challenges in Rabat is to find solutions for high demand in housing, as a green and sustainable city attracts people. ”

H.E. MOHAMED SADIKI

Mayor, Rabat



“ The investment vehicle of a real estate trust allowed for holding buildings in V Park, India, over 15 years, to move tenants around temporarily, and create a more vibrant hub. ”

NINA YANG

Chief Executive Officer,
Sustainable Urban Development,
Ascendas-Singbridge



“ The message from the community is very clear: Less is sometimes best. ”

NICHOLAS BROOKE

Chairman, Hong Kong Harbourfront
Commission and Lifetime Trustee,
Urban Land Institute



“ Old really is gold in Budapest. Our aim is to promote city-wide public space renewal and community-based local rehabilitation with grassroots projects initiated from the bottom up. ”

DR GÁBOR BAGDY

Deputy Mayor, Budapest



“ There's another simpler, more straightforward way for the city of the future: to invite people to use their own muscles to walk and cycle more. ”

PROF JAN GEHL

Founder, Gehl Architects



“ In terms of considering corporate return on investment, the key factors are benign government policies and expectation of Singapore's continued economic growth. ”

LEE YI SHYAN

Chairman of Board of Directors of REIT Managers,
OUE



PLANNING SESSION 2

CAN WE CREATE INCLUSIVE COMMUNITIES THROUGH MASTER PLANNING?

Cities have always hosted much diversity, with people of different ethnicities, languages, religions, social classes, ideologies and spending power. As urbanisation continues apace globally, cities are no longer just centres of commerce, industry and political power. Cities also serve as havens to increasingly diverse communities. How can cities be planned and developed so that they are more inclusive and accepting of diversity?

KEY OBSERVATIONS

1. Know and engage the ground.

Building inclusive communities starts with gathering data for formulating policies. In Singapore's public housing estates, detailed planning helps to achieve social objectives of fostering inclusiveness, with policies to discourage the formation of ethnic enclaves, and for creating a mix of residents from different income levels and age groups. Social cohesiveness is nurtured with community spaces created for residents to mingle. People-oriented event programming encourages communities to take ownership and work with agencies to promote neighbourliness and eco-friendly living.

2. Nurture community spaces.

Fostering community relations within a neighbourhood is more conducive when affordable

housing is well-designed, of high quality and with active community spaces that are inclusive for children, the elderly and the disabled. Community spaces can be a major state amenity (e.g. New York City's Central Park) or smaller spaces where citizens take charge (e.g. Greenwich Village), where a proposed highway was halted to preserve community heritage. In Palava, developers take on city-planning responsibilities, including setting up an Urban Research Institute for data-driven solutions and involving local artists to make living in Palava more colourful.

3. Keep plans flexible.

Building plans must be adaptable to changes in the cycle of people's lives. In Fukuoka, social media is used to gather feedback on planning and design ideas for further improvements. The possibilities of urban planning and design have to be simplified, so that citizens can understand why they have to contribute to fostering sustainable neighbourhoods, hold their leaders to account and play a greater part in shaping their cities. A technology like virtual reality can be applied to help residents see how every change they make affects everything around them, and why certain changes can, or cannot, be made if everyone is to live in harmony.



MODERATOR

DR ORNA ROSENFELD

Independent Senior Housing Expert and Adviser, The European Commission

SPEAKERS



“ Fukuoka uses Twitter to gather opinions directly from citizens, so that we can inform, and keep in touch with, all the people on new city developments. ”

H.E. SOICHIRO TAKASHIMA

Mayor, Fukuoka City



“ Big things come from the community, from ideas individuals have. Yes, governments must work top-down, and the community works bottom-up, and so, we'll be co-active in securing our future. ”

ALEX WASHBURN

Former Chief Urban Designer,
NYC Department of City Planning; Principal,
DRAW Brooklyn LLC



“ Government agencies can only facilitate. We don't live there, but people do...it's important for a community to truly participate together. ”

DR CHEONG KOON HEAN

Chief Executive Officer,
Housing and Development Board,
Singapore



“ We need to ensure that our master planning is in harmony with good legislation, especially in land and financing. Plans have to implementable. ”

DR AISA KIRABO KACYIRA

Deputy Executive Director and Assistant
Secretary-General, UN-Habitat



“ To create inclusive communities, it is essential to think from the perspective of how to improve the disposable incomes of the economically weakest members of society. ”

ABHISHEK LODHA

Managing Director, Lodha Group



RESILIENCE SESSION 1

WHAT DOES IT TAKE TO BE AN ENVIRONMENTALLY AND ECONOMICALLY RESILIENT CITY?

Climate change is one of the biggest global challenges today. Cities are exploring innovative solutions, building robust infrastructure and working out new financing arrangements in a bid to mitigate and adapt to the effects of climate change. A resilient city continuously learns from its past experiences as well as from others, and takes an integrated and holistic approach that will allow the city to respond, adapt and recover. What should cities do to ensure that they can quickly recover from shocks and even take advantage of new opportunities arising from these threats?

KEY OBSERVATIONS

1. Foster resilience pre-emptively.

A city's resilience can be built through preventive actions to anticipate and mitigate current and future challenges. Complex, longer-term issues require early and coordinated intervention all the more. For physical resilience, leadership is important for assigning the city budget to important initiatives such as managing coastal infrastructure against natural disasters and climate change. In Rotterdam, the philosophy and approach of environmental measures to prevent coastal flooding is applied to social resilience initiatives to prevent social degradation in areas facing challenges related to housing, the labour market and crime.

2. Prepare for future jobs.

Economic resilience includes building up skills to prepare the people for inevitable workplace changes and job displacements due to the adoption of new technology. This raises many challenges in cities with urban poverty. Pune may have a large pool of manpower, but the skills gap is considerable in a job market dominated by information technology.

3. Work together for the environment.

Cities can learn from more compact cities that have reduced resource footprints by integrating the social, industry and transport sectors. To change mindsets, regulations are the "last push" for companies resistant to implementing environmentally-friendly systems. Panama City is committed to addressing environmental concerns when planning and designing a city in the middle of a rainforest, where it is also connected to the two oceans within an hour's drive. Entrepreneurs, non-profit organisations and the community have helped save 15 mangrove species, which are important for flood control. Singapore is helping Panama City to set up an eco-protocol (a set of expectations and incentives) for the construction industry to help manage natural resources.



MODERATOR

HENK OVINK

Dutch Special Envoy, International Water Affairs, Netherlands

SPEAKERS



“ I’ve asked people working to make the city resilient against coastal flooding...to see if we can copy the same way of thinking and philosophy in preventing social degradation. ”

AHMED ABOUTALEB

Mayor, Rotterdam



“ Building everything from the ground up with citizen participation is painful, long and difficult, but necessary. ”

RAISA BANFIELD

Vice Mayor, Panama City



“ The way for cities to deal with megatrends of urbanisation and climate change is to have very reliable infrastructure combined with the smartest digital solutions out there. ”

JENNY BOFINGER-SCHUSTER

Senior Vice President,
Sustainability & Cities, Siemens



“ We have to think over the long-term, not just in a connected way, but also in terms of decades. This is very important, particularly for climate resilience. ”

JEREMY BENTHAM

Vice President,
Global Business Environment and
Head of Shell Scenarios, Shell



“ The Chief Resilience Officer plays a crucial role to bring all the challenges a city faces onto a common platform. ”

MAHESH HARHARE

Chief Resilience Officer,
Pune Municipal Corporation



RESILIENCE SESSION 2

SOCIAL RESILIENCE: A CRITICAL COMPONENT OF A LIVEABLE AND SUSTAINABLE CITY

Urban resilience is about the capacity of individuals, communities, institutions, businesses and systems within a city to adapt and thrive despite stresses and acute shocks. Chronic stresses such as rising socio-economic disparities, rapidly ageing population and increasing diversity will impact the way cities plan and progress. Not only are these chronic stresses evolving with greater complexity, they are compounded by new urban challenges such as terrorism, cyber security threats and more. How can the social aspects of planning for resilience—raising awareness, promoting collaboration, empowering communities through capacity building and engagements—be further cultivated?

KEY OBSERVATIONS

1. Care for the people.

To foster social resilience, cities can do more for their citizens' welfare. Tirana, with an unusually young population, is refurbishing the city to build its next generation of kindergartens and nurseries. But Tirana keeps in mind the interests of the larger public, so public schools are also used as public spaces for the community. In New Taipei City, to cater to a rising proportion of elderly residents, initiatives for seniors include free access to sports facilities and courses with trained volunteer instructors, free reading glasses funded by donations from businesses, and “joint dining” for

seniors to socialise and enhance their emotional wellbeing. Promoting sports is one way to bring people together and enhance city living, with spin-off benefits, including better health and greater social cohesion.

2. Build with inclusivity in mind.

Cities get what they plan for. If they build for cars, they get cars. If they build for bicycles, they get bicycles. Urban projects can be more inclusive across generations and building types, such as mixed-use developments for multi-generation living, and nursing homes built next to schools. Social resilience is not about expensive technical solutions, but about setting the right priorities to be more inclusive.

3. Look to seniors as a resource.

To overcome pre-existing age-related prejudices, cities need to challenge social perceptions about the elderly, to see them as a resource rather than a liability, and to empower them as decision-makers. Cities should take a leaf from Japan, where the elderly act as change agents in their communities to help strengthen the social capital. In the aftermath of an earthquake, seniors can help restore normality because they are familiar with the characteristics of each precinct. Seniors can also co-create community-owned resource hubs that are financially self-sustainable without government funding, to promote more inter-generational interaction, cultural inclusiveness and disaster risk management.



MODERATOR

MICHAEL BERKOWITZ

President, 100 Resilient Cities

SPEAKERS



“ There’s this platform called 8-80 Cities: Ask if something works for an eight-year-old and 80-year-old. If it works for these two indicative species, then it works for everyone else. ”

ERION VELIAJ

Mayor, Tirana



“ Government has a limited budget, so we need innovation and initiative...if you can earn the trust of private sector donors, they can do anything for you. ”

H.E. DR ERIC CHU

Mayor, New Taipei City



“ We need to look at not only urban areas but also resources like food and water coming from outside the city, only then can we talk about urban resilience. ”

DR EMANI KUMAR

Deputy Secretary General ,
ICLEI - Local Governments for Sustainability



“ Instead of segregating aspects of social resilience and infrastructure, can we design a city that works for all ages, for everyone? ”

DR EMI KIYOTA

Founder and President, Ibasho



“ At the city level, sports can unite people in a way that no other activity arguably can. ”

DAVID PORTAS

Managing Partner, Portas Consulting



INNOVATION SESSION 1

DISRUPTIVE INNOVATIONS: A BANE OR BOON FOR CITIES?

Cities around the world are riding the wave of technological advancement to create future-ready urban solutions tailored to their development needs. Technology-enabled innovations come with a slew of promises made to a city's inhabitants—from improving public service delivery to anticipating and solving urban challenges, and building an inclusive and vibrant community. What structures and processes do cities require to readily embrace disruptive innovations?

KEY OBSERVATIONS

1. Start with self-disruption.

Society can be re-engineered as a “living lab” for innovation. Singapore's Smart Nation movement is a continuation of the nation's ongoing computerisation programme and info-communications technology master plans since the 1980s. Cities seeking to embrace disruptive innovation should start with self-disruption, which is an opportunity to re-engineer the society and its systems. The government should break silos and work to deliver integrated services in more

citizen-centric ways. Open platforms can be created to enable co-creation of solutions by people, civil society and businesses. This would also involve being committed to making as much data available as possible.

2. Earn public trust first.

A good city has to be what citizens want, not just what the mayor wants. How well people can adapt to the fast pace of change brought about by technology depends on a foundation of public trust. The government can earn trust through good communication.

3. Step up governance.

As more technology is applied across society, cities will have to play their governance role to ensure that consumers' rights and privacy are protected. Cities also need to manage workplace transitions. In Singapore, the government is taking the lead to make sure no one gets left behind, including special efforts to identify a set of basic digital skills everyone should have, funding and facilitating the necessary skills training.



MODERATOR

VISWA SADASIVAN
Chief Executive Officer,
Strategic Moves

SPEAKERS



“ A key thrust for cities embracing disruptive innovation is empowering people to become confident to face the future. This is how we ensure that technology can be a boon, not a bane. ”

DR VIVIAN BALAKRISHNAN
Minister, Ministry of Foreign Affairs and
Minister-in-Charge of the Smart Nation Initiative,
Singapore



“ In Adelaide, we asked ourselves how we could transform our city economically, and our answer always came back to digital infrastructure, to embracing change. ”

MARTIN HAESE
Lord Mayor, Adelaide



“ For world cities to flourish, we need to go beyond technology...we will need people with the right motivation, stewardship, knowledge and renewable skills. ”

HARRIET GREEN
Head of Asia Pacific, IBM



“ We are working towards Society 5.0, which is human-centred, balancing economic advancement with resolution of social problems, integrating cyberspace and physical space. ”

DR KATSUMI EMURA
Executive Vice President, Chief Technology
Officer and Member of Board, NEC Corporation



“ In future, the pace of change will be so fast that our learning has to evolve, teaching our kids to adapt to change and learning to learn. ”

AMIT JAIN
Head of Asia-Pacific, Uber



“ Disruptive innovation is not always a force for good; not everything that is smart is good for the city and for citizens. ”

DIDIER HOLLEAUX
Executive Vice-President, ENGIE



“ We need a plan to manage the transformation of society, which will differ in countries depending on their culture and traditions. ”

PAUL MICHAEL SCANLAN
CTO, Huawei Carrier Network Business Group



INNOVATION SESSION 2

DOES PUBLIC-PRIVATE-PEOPLE COLLABORATION YIELD THE BEST SOCIAL INNOVATIONS?

Social innovation is the process of developing and deploying solutions to address challenging and systemic social and environmental issues. The rise of social innovation labs in recent years has encouraged new forms of cooperation between the people, public and private sectors. These labs typically focus on small neighbourhoods or precincts and provide ample opportunities for prototyping and testing of ideas to adapt to the needs of the society. How can local governments work with businesses, research institutions and citizens to create a healthy ecosystem that enables innovative solutions to thrive in cities?

KEY OBSERVATIONS

1. Do not overlook easier solutions.

Cities need to behave more like technology start-ups by building up capabilities to make quick assessments of the implications of adopting technologies and adjusting policies. It is necessary to remain open to solutions that are not already known, and to make the city's issues known. Solutions can be built by optimising existing infrastructure and reducing resource costs. For example, to deal with urban heat there are all sorts of engineering solutions, but some cities just plant more trees and make public spaces more walkable. Sometimes, solutions can even be about shaping behaviour instead of building infrastructure.

2. Solutions need to be inclusive.

Partnerships can be multi-pronged, with cities partnering the private sector, universities and cultural institutions. Melbourne acquired renewable energy from wind farms, which enabled a multi-sector response that secured renewable energy supply, created jobs and worked to combat climate change. The benefits of social innovations need to reach the widest range of people, including lower-income groups. In cities across Africa, mobile communications turned out to be more affordable, hence became more effective than improving land-line phone networks.

3. Pitch the benefits of new technologies clearly.

Data is a highly valuable asset and cities can curate and monetise it if people's privacy concerns are addressed. To achieve this, cities can foster greater public buy-in if people know that adopting new technologies will benefit them. Helsinki positions technological adjustments by adding one hour of leisure time per day for citizens. This positioning comes from the approach of valuing people as the focus of all public-private-people projects. The city government acknowledges that it does not always have all the answers, thereby encourages active co-creation of solutions with citizens and other partners. Past citizen-led solutions have been found to be effective and low-cost.



MODERATOR

NICHOLAS FANG

Executive Director, Singapore Institute of International Affairs

SPEAKERS



“ Our experience in partnering with the private sector is that it’s as important to manage that stakeholder relationship as it is to have that infrastructure or technological solution. ”

ARRON WOOD

Deputy Lord Mayor, Melbourne



“ The city only needs to offer open data for people to create solutions. The imagination is the only limit. ”

NASIMA RAZMYAR

Deputy Mayor, Helsinki



“ There are opportunities for democratising and decentralising services. The key question is whether lower-income cities can leapfrog or catch up with technology. ”

DR FRANK RIJSBERMAN

Director General,
Global Green Growth Institute



“ What cities should do with data is to retain it, curate it like museum artifacts, and federate it to cut across silos. The future monetisation of data will be key. ”

DR GOH ENG LIM

Vice President and SGI Chief Technology Officer,
Hewlett Packard Enterprise



“ Time is not on our side and challenges are not waiting for you to start from ground zero. We should start with investigating the last best solution developed. ”

HANY FAM

Executive Vice President,
Enterprise Partnerships, Mastercard



“ If every city had a contact point for entrepreneurs to get in touch, or a website to collect ideas, there could be some amazing solutions out there. ”

DAVID WALLERSTEIN

Chief Exploration Officer, Tencent



CO-LOCATED EVENTS

WCS THEMATIC FORUMS

The WCS Thematic Forums, Business Forum and Innovation Forum were jointly organised with our supporting ministries or agencies to address issues on innovation and collaboration not covered by the Thematic Tracks.

SHAPING CITIES THROUGH INNOVATION AND COLLABORATION IN CULTURE

Co-organised with Ministry of Culture, Community, and Youth

Social fragmentation and technological disruptions are increasingly prevalent challenges faced by cities and their residents. This forum shared how cities can meaningfully weave cultural elements into our urban landscape, to maximise their positive impact and the social benefits for residents.



Keynote Address by Martin Haese, Lord Mayor, Adelaide.



Panel discussion moderated by Warren Fernandez, Editor-in-Chief, The Straits Times.

URBAN GOVERNANCE: SINGAPORE'S PRINCIPLES AND APPROACHES

Co-organised with Civil Service College

This forum featured local case studies that illustrate Singapore's approach and underlying principles of urban governance and discussed how the country managed to create a liveable and sustainable city to work, live and play in.



Panel discussion moderated by Peter Ho, Former Head of Civil Service, Singapore.



Arjen Droog, Vice Director, Regio Food Valley NL, presenting on achieving synergies through cluster development.

BUILDING AND GROWING A THRIVING URBAN FOOD ECO-SYSTEM

Co-organised with Agri-Food & Veterinary Authority

Experts in the field of agri-technology innovation and cluster development provided insights on urban food solutions essential to build a thriving food ecosystem in an urban environment.

DISCOVERING THE POTENTIAL OF SOUTH ASIA'S OPPORTUNITIES

Co-organised with Singapore International Water Week, CleanEnviro Summit Singapore and Enterprise Singapore

Panellists from the public and private sectors discussed the current gaps in urban solutions and investment opportunities in South Asia, with in-depth focus on current projects in Andhra Pradesh, Maharashtra, Colombo and Thimphu.



Disruption and Creation: Harnessing Market Innovations for Urban Solutions in Andhra Pradesh.

CHINA IN THE NEW ERA

Co-organised with CleanEnviro Summit Singapore

The China Innovation Forum discussed China in the New Era and the various innovations that the country is embracing to achieve inclusive and sustainable development.



Sun Xueling, Senior Parliamentary Secretary, Ministry of Home Affairs & Ministry of National Development (4th from right), Dr Liu Thai Ker, Chairman, Centre for Liveable Cities (4th from left), with speakers and moderators of the China Innovation Forum.



Better Cities with Smart Technologies: Government and Business Flows in a Smart City.

CO-LOCATED EVENTS

Co-Located Events at WCS touched on topics related to liveable and sustainable cities that complemented and reinforced the main programme of the Summit. These 31 events were organised by strategic partners and supporting organisations,

with each session deep-diving into specific topics. Co-Located Events offer opportunities to interact with policymakers, government officers and industry practitioners from around the world with different expertise.



Z-Island: The Latest Urban Expansion Area of Bilbao.



Healthy Cities: Practical Advice on Inclusion and Health and Space.

LIST OF CO-LOCATED EVENTS AT WCS 2018

EVENT	ORGANISER
Meeting of Governors/Mayors of ASEAN Capitals	People's Association of Singapore
ASEAN Mayors Forum	United Cities and Local Governments in Asia-Pacific and Centre for Liveable Cities
ASEAN Smart Cities Network (ASCN) Inaugural Meeting	The Association of Southeast Asian Nations and Centre for Liveable Cities
Healthy Cities: Practical Advice on Inclusion and Health and Space	Cities Changing Diabetes, Gehl and C40
Global Infrastructure Initiative Roundtable: Smart Cities in Southeast Asia	McKinsey
Dassault Systèmes Conferences	Dassault Systèmes
Guangzhou City Conference: The Conversations between Guangzhou and the World	Guangzhou Information Office and Dassault Systèmes
Z-Island: The Latest Urban Expansion Area of Bilbao	Bilbao International
Singaporean Innovation Corridor @ WCS – Amaravati Pitch Competition	Enterprise Singapore and Centre for Liveable Cities
Green Growth & Business Forum 2018: Seizing the Green Growth Opportunity	National Climate Change Secretariat
Better Cities with Smart Technologies: Government & Business Flows in a Smart City	Mastercard Asia-Pacific
ICOST Conference – Designing a Better Future – Urban Assisted Living	Image and Pervasive Access Laboratory
Singapore-Indonesia Real Estate Investment Prospects	Real Estate Developers' Association of Singapore and Jakarta Property Institute
Launch of "Cities in the Driving Seat" Report	Siemens
Urban Systems for a Sustainable Future – the Nordic Way	Danish Architecture Centre
Cities for Our Future Showcase	Royal Institution of Chartered Surveyors
Co-creating our cities: conversation with startups, governments and corporates working towards more liveable cities	ENGIE
Danish Seminar	Confederation of Danish Industry and Danish Export Association
The Future of Asia and Pacific Cities Report 2019: Thematic consultation on Smart Cities in Asia and the Pacific	United Nations Economic and Social Commission for Asia and the Pacific
City Innovators: Pitch Perfect	Centre for Liveable Cities



Launch of "Cities in the Driving Seat" Report.

EVENT	ORGANISER
Social Resilience through Sport and Physical Activity	Sport Singapore and Portas Consulting
Tackling Climate Change through Technological Innovation	C40 and National Climate Change Secretariat
Show Me the Numbers: IFHP Social Cities	International Federation for Housing and Planning
Age-Friendly Cities: Sharing from New Taipei, Seoul and Singapore	Seoul Institute and Centre for Liveable Cities
Looking Global for Local Impact in Urban Asia	Urban Land Institute and Centre for Liveable Cities
The Future of Cities in the Fourth Industrial Revolution	World Cities Summit Young Leaders
Science and the Sustainable City	Springer Nature
Le Monde Smart Cities Innovation Awards: Cities programs evaluation, beyond marketing	Groupe Le Monde
The Liveability Challenge	Temasek Foundation Connects and Eco-Business
Transformative Research for Future Cities	Future Cities Laboratory at the Singapore-ETH Centre
Cooling Singapore Symposium: Towards a heat resilient Singapore	Cooling Singapore, Singapore-ETH Centre



Co-creating our cities: conversation with startups, governments and corporates working towards more liveable cities.



Age-Friendly Cities: Sharings from New Taipei, Seoul and Singapore.

PUBLICATION LAUNCH

CLC launched 10 publications during the WCS in celebration of the centre's 10th Anniversary.



Launch of "Urban Systems Studies – Technology and the City: Foundation for a Smart Nation" by Dr Vivian Balakrishnan, Minister, Ministry of Foreign Affairs and Minister-in-Charge of the Smart Nation Initiative, Singapore.



Launch of "Urban Systems Studies – Food and the City: Overcoming Challenges for Food Security" by Sun Xueling, Senior Parliamentary Secretary, Ministry of Home Affairs and Ministry of National Development.



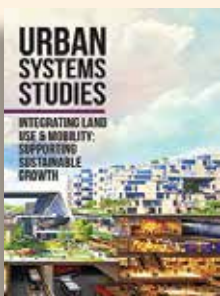
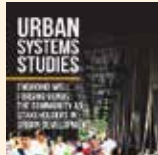
Making Cities Liveable:
Insights from 10 Years of
Lectures at The Centre for
Liveable Cities



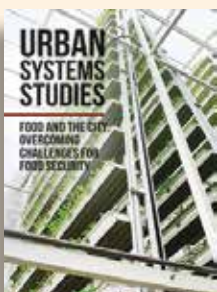
Urban Solutions Issue 13:
Innovation and Collaboration



**Engaging Well,
Forging Bonds:**
The Community as
Stakeholders in Urban
Development



**Integrating Land Use
& Mobility:**
Supporting Sustainable
Growth



Food and the City:
Overcoming Challenges for
Food Security



Technology and the City:
Foundation for a Smart
Nation



A Resilient Singapore



**Smart Cities in
Southeast Asia**



Singapore and India:
Partnering for Liveable and
Sustainable Cities



The Centre for Liveable Cities Annual Report FY17/18



MEMORANDUMS OF UNDERSTANDING

16 Memorandums of Understanding (MoUs) and agreements were inked, paving the way for collaborations between cities and stakeholders in the public, private and people sectors.



LIST OF MoUs, AGREEMENTS AND ANNOUNCEMENTS INKED DURING WCS 2018

MoUs, AGREEMENTS AND ANNOUNCEMENTS	PARTIES
Singapore Declaration (on environmental sustainability)	<ul style="list-style-type: none"> • Singapore • ASEAN Mayors/Governors
Memorandum of Understanding	<ul style="list-style-type: none"> • United Nations Development Programme (UNDP) • Japan External Trade Organisation (JETRO)
Letter of Intent	<ul style="list-style-type: none"> • Phuket's Digital Economy Promotion Agency (DEPA) • UNDP
Letter of Intent	<ul style="list-style-type: none"> • Banyuwangi City, Indonesia • Wiley and Sons
Letter of Intent	<ul style="list-style-type: none"> • Chonburi's AMATA Smart City • Yokohama Urban Solution Alliance (YUSA)
Letter of Intent	<ul style="list-style-type: none"> • International Finance Corporation (IFC) • IBM Asia Pacific
Memorandum of Understanding to promote greater use of geospatial information and technology for sustainable urban development in partner cities.	<ul style="list-style-type: none"> • World Bank • Singapore Land Authority (SLA)
Renewal of the Memorandum of Understanding	<ul style="list-style-type: none"> • Centre for Liveable Cities (CLC) • National University of Singapore (NUS) School of Design and Environment (SDE)
Memorandum of Understanding to design and execute Smart City Masterplans in cities across Asia.	<ul style="list-style-type: none"> • Keppel Urban Solutions • ST Engineering
Memorandum of Understanding for future development of the "Padang Pariaman Smart City Implementation Project" in Indonesia.	<ul style="list-style-type: none"> • Dassault Systèmes • District Government of Padang Pariaman, Indonesia
Memorandum of Understanding on a research collaboration on Digital Fabrication using Additive Manufacturing Technology for Public Housing.	<ul style="list-style-type: none"> • Housing & Development Board (HDB) • Robin Village Development Pte Ltd
Memorandum of Understanding on a research collaboration on 5MWp Floating Solar Technology for Marine Environment.	<ul style="list-style-type: none"> • Housing & Development Board (HDB) • M/S ISO Landscape Pte Ltd
Memorandum of Understanding on Smart Energy at Tengah.	<ul style="list-style-type: none"> • Housing & Development Board (HDB) • Singapore Power
Memorandum of Understanding on the design, build and deployment of an open digital platform in Punggol Digital District.	<ul style="list-style-type: none"> • JTC • ST Engineering
Memorandum of Understanding renewal in Technology Early College High-Schools (P-TECH).	<ul style="list-style-type: none"> • Ministry of Education Singapore (MOE) • IBM Pathways
Memorandum of Understanding	<ul style="list-style-type: none"> • Centre for Liveable Cities (CLC) • Seoul Institute (SI)



CITIES @ CITY SOLUTIONS SINGAPORE

CITIES @ CITY SOLUTIONS SINGAPORE

The City Solutions Singapore (CSS) is the preferred global platform to make meaningful connections and to showcase new and cutting-edge solutions for smart nations and urban environments. CSS provides the catalyst to seek new partnerships and business opportunities. Featuring over 20 themed pavilions, the integrated expo in 2018 covered over 31,000 sqm and featured four overarching themes:

Water Expo @ CSS, Cities @ CSS, Environment @ CSS, and Transport @ CSS. The participation of over 1,000 companies makes CSS an international marketplace of choice for stakeholders across the value chain of sustainable development. Few other exhibitions in the world cover these key sectors in such an integrated manner that creates tremendous synergy for both the exhibitors and visitors.





Singapore Government Pavilion.

SINGAPORE GOVERNMENT PAVILION

Imagine Singapore in 2035. What could our future city look like in the light of the opportunities and challenges we have? Themed “Liveable & Sustainable Cities: Embracing the Future through Innovation and Collaboration”, the Singapore Government Pavilion envisioned a tomorrow pulled together by the government, research institutions, agencies, industries and the community. It showcased innovative solutions across transportation, security, food and energy, climate change, space management and digital capabilities.

The Singapore Government Pavilion road mapped Singapore’s progress in developing integrated urban solutions, building economic, environmental, physical and social resilience, and engaging with communities. Through live demonstrations and interactive media displays, the showcases immersed participants in the development of cutting-edge innovations that are already a reality, or in the pipeline for our liveable and sustainable future.

PARTICIPATING SINGAPORE GOVERNMENT AGENCIES

- Agency for Science, Technology and Research
- Agri-Food & Veterinary Authority of Singapore
- Centre for Liveable Cities
- Economic Development Board
- Housing & Development Board
- JTC Corporation
- Ministry of the Environment and Water Resources
- National Environment Agency
- National Parks Board
- People’s Association
- Singapore Land Authority
- Singapore Tourism Board
- Sport Singapore
- Urban Redevelopment Authority

City of Seoul



Dassault Systèmes



Hewlett Packard Enterprise



Huawei Café



Keppel Corporation



Lodha Developers



OUE



ST Engineering



Mastercard



WCS BOOTHS

- City of Medellín
- City of Seoul
- Dassault Systèmes
- ENGIE
- Hewlett Packard Enterprise
- Keppel Corporation
- Lodha Developers
- Mastercard
- OUE
- Siemens
- Sino-Singapore Guangzhou Knowledge City
- ST Engineering
- UOL
- City Developments Limited City Innovators
- Huawei Café
- IBM Connect Lounge

CITY DEVELOPMENTS LIMITED CITY INNOVATORS

City Innovators was a new pop-up platform for start-ups to pitch their latest innovative technologies or solutions to over 3,000 government and industry leaders, urban solution experts and potential investors participating in the World Cities Summit 2018. The programme culminated with a networking opportunity at Industry Night at City Solutions Singapore Expo.



CITIES @ CITY SOLUTIONS SINGAPORE EXHIBITOR BOOTHS

- Anacle Systems
- Association of Small and Medium Enterprises
- Ecoparadise
- Evercomm
- France Pavilion
- Fraunhofer Singapore
- H3 Dynamics
- Hydac Technology
- MECO Water Purification Asia
- NCS
- Noelani Technologies
- Poland Pavilion
- PTGEM
- Sino-Singapore Chengdu Innovation Park Development
- Sino-Singapore Tianjin Eco-City Investment
- UK Pavilion
- Viatick
- Z-Power Automation



FORGING CONNECTIONS

EXCLUSIVE NETWORKING NIGHT @ CÉ LA VI

Interactive discussions from the WCS Mayors Forum and WCS Young Leaders Symposium culminated at the WCS Exclusive Networking Night, an intimate evening of conversations and networking opportunities with mayors, governors and industry leaders, as well as our distinguished WCS Patron and Platinum Sponsors.





NETWORKING LUNCHES





INDUSTRY NIGHT AT CSS

The Industry Night was held at the City Solutions Singapore exhibition, where thought leaders from across the urban, water, environment and transport sectors relaxed over wine, canapés and live music. It was an opportunity to encourage cross-sector partnerships and to celebrate collaborations.





SITE VISITS





GILLMAN BARRACKS

Art and the City: Gillman Barracks, Former Military Housing Turned Arts Hot Spot

A unique visual art cluster, surrounded by lush tropical greenery and set in conserved, former military quarters, Gillman Barracks is home to international and Singapore art galleries, research centre NTU Centre for Contemporary Art Singapore, and a children's centre for creativity. Through this tour, delegates gained an understanding of how collaborations in art and culture between the public, private and people sectors can help enhance a city.





OUR TAMPINES HUB

Our Tampines Hub: Singapore's Largest Integrated Community and Lifestyle Hub

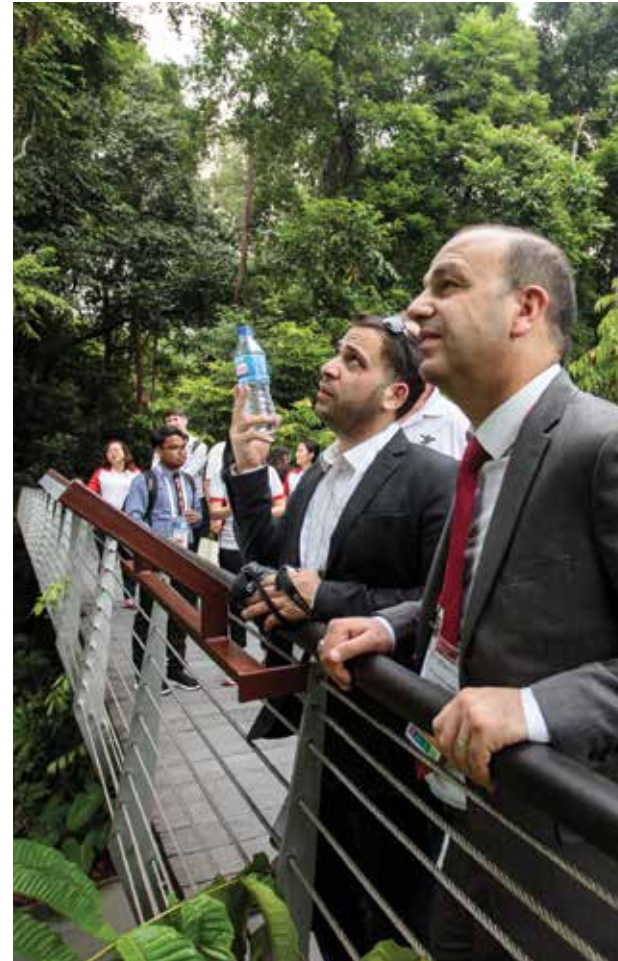
Our Tampines Hub is a community-focused development that brings together multiple government agencies and offers a comprehensive range of services and facilities for residents. Our Tampines Hub celebrates the full sense of community through meaningful engagement, and enriches the urban life of residents through multiple experiences, empowering them to take ownership of the hub.



BISHAN-ANG MO KIO PARK

Bringing Kallang River into Bishan-Ang Mo Kio Park: Singapore's Flagship ABC Waters Project

One of the largest and most popular parks in Singapore, Bishan-Ang Mo Kio Park was redeveloped in 2009 under the Active, Beautiful, Clean (ABC) Waters Programme. The Programme aims to bring people closer to water by beautifying utilitarian facilities, providing waterfront community spaces and improving water quality. The 2.7km-long concrete canal running along the length of the park has since been transformed into a meandering river that is surrounded by lush banks of wildflowers and well-integrated with nearby residences.



SINGAPORE BOTANIC GARDENS

Singapore Botanic Gardens Learning Forest: Greening and Biodiversity in the City

The Singapore Botanic Gardens (SBG) is the first and only tropical botanic garden on the UNESCO's World Heritage List. Established in 1859, SBG is a leading international institution of tropical botany and horticulture, and contributes greatly to the implementation of Singapore's Garden City vision.





KAMPUNG ADMIRALTY & KHOO TECK PUAT HOSPITAL

Integrated Planning for Quality Living in Kampung Admiralty & Khoo Teck Puat Hospital: Active and Green Living in Community Facilities

Aimed at promoting active living and social interaction within the community, Kampung Admiralty ("Kampung" means "Village" in Malay) is the first development in Singapore to fully integrate housing for the elderly with a wide range of social, healthcare, communal and retail facilities. Designed for seniors to lead independent and active lifestyles, units come complete with elderly-friendly features. In parallel, branded as "garden in a hospital, hospital in a garden", Khoo Teck Puat Hospital incorporates nature into its design to create a tranquil environment that promotes patients' rehabilitation.





MEDIA COVERAGE

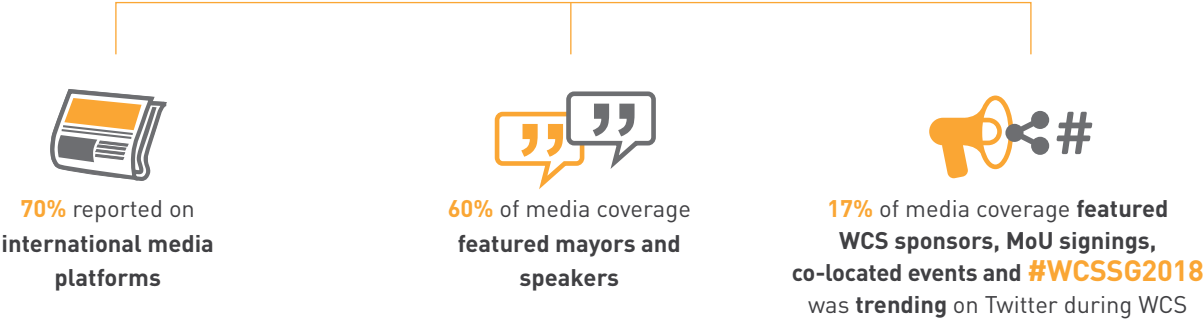
MEDIA COVERAGE

Across local and international media, a total of 1,335 articles related to the Summit were covered across print, broadcast and online channels. This generated a total of S\$10.5 million in Advertising Value Equivalent (AVE), corresponding to S\$31.5 million in PR value. More stories were carried across online platforms, effectively leveraging on the shift in media consumption behaviour towards the digital space. The media coverage included numerous thought-leadership

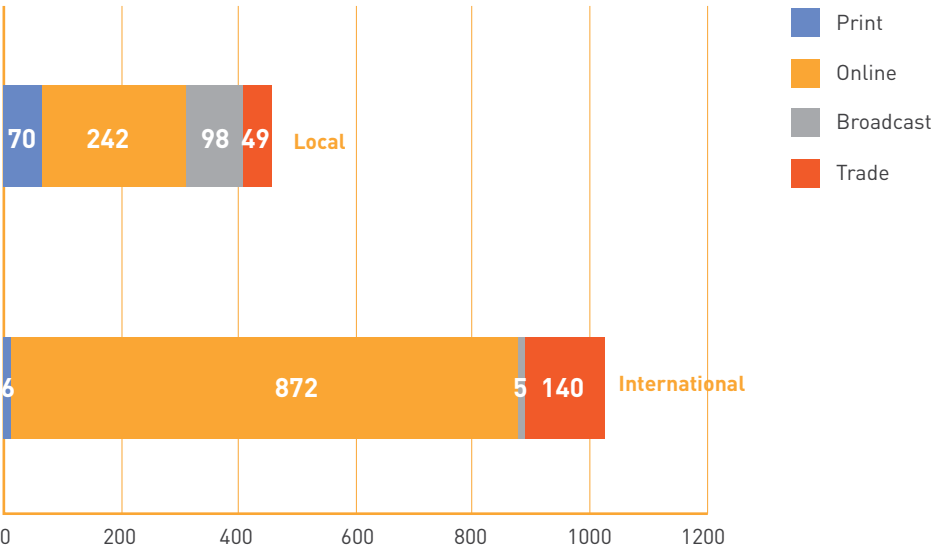
articles and op-eds, stories and conversations on how to adapt to what the future might bring, with confidence and openness to change and cooperation.

On the digital front, the event hashtag #WCSSG2018 was trending on Twitter across all four days of the conference, with a total of almost 3,800 tweets from about 1,900 people.

1,335 PIECES OF COVERAGE



Breakdown of media coverage by origin and media type







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PROGRAMME-AT-A-GLANCE

	AM	LATE AM	PM	LATE PM	EVENING
7 JUL SAT	Meeting of the Governors and Mayors of ASEAN Capitals (MGMAC)				
8 JUL SUN	World Cities Summit Young Leaders Symposium By-Invite Only		Site Visits: - Our Tampines Hub - Gillman Barracks - Singapore River & Marina Bay		Exclusive Networking Night
	ASEAN Smart Cities Network Inaugural Meeting	World Cities Summit Mayors Forum By-Invite Only			
9 JUL MON	Singapore International Water Week				Lee Kuan Yew Prize Award Ceremony & Banquet
	City Solutions Singapore				
	Opening Address, Keynote Address and Opening Plenary	Lee Kuan Yew World City Prize and Water Prize Lectures	Lee Kuan Yew World City Prize Forum Joint Leaders Forum: Closing the Waste-Water-Energy Loop - Catalysing a Resilient and Sustainable Future		
		Singapore International Transport Congress and Exhibition			
10 JUL TUES	City Solutions Singapore				Industry Night at City Solutions Singapore
	Thematic Tracks: - Urban Governance - Planning - Resilience - Innovation	World Cities Summit Plenary	Thematic Forums: - Shaping Cities through Innovation and Collaboration in Culture - Urban Governance: Singapore's Principles and Approaches - Building and Growing a Thriving Urban Food Eco-system		
			Site Visits: - Singapore Botanic Gardens - Bishan - Ang Mo Kio Park		
	Co-located Events				
	South Asia Business Forum				
	Singapore International Water Week				
	CleanEnviro Summit Singapore				
	Singapore International Transport Congress and Exhibition				
11 JUL WED	City Solutions Singapore				
	Co-located Events				
	Site Visit: Kampung Admiralty & Khoo Teck Puat Hospital				
	China Innovation Forum				
	Singapore International Water Week				
	CleanEnviro Summit Singapore				
12 JUL THU	Singapore International Transport Congress and Exhibition				
	Singapore International Water Week				
	CleanEnviro Summit Singapore				

*Information is accurate at the time of print

LEGEND

- Joint Programme
- World Cities Summit
- Singapore International Water Week
- CleanEnviro Summit Singapore
- Singapore International Transport Congress and Exhibition

REFLECTIONS: WORLD CITIES SUMMIT 2018

Liveable & Sustainable Cities: Embracing the Future through Innovation and Collaboration

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ABOUT THE ORGANISERS

CENTRE FOR LIVEABLE CITIES



CLC is a division of



Set up in 2008 by the Ministry of National Development and the Ministry of the Environment and Water Resources, the Centre for Liveable Cities (CLC)'s mission is: to distil, create and share knowledge on liveable and sustainable cities.

CLC's work spans four main areas: Research, Capability Development, Knowledge Platforms, and Advisory. Through these activities, CLC hopes to provide urban leaders and practitioners with the knowledge and support needed to make our cities better.

For more information, please visit www.clc.gov.sg

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To make Singapore a great city to live, work and play

The Urban Redevelopment Authority (URA) is Singapore's national land use planning and conservation agency. URA's mission is "to make Singapore a great city to live, work and play". We strive to create a vibrant and sustainable city of distinction by planning and facilitating Singapore's physical development in partnership with the community.

As the main land sales agent for the State, our multifaceted engagement strategy includes the sale of State land to attract and channel private capital investment to develop sites for meeting our land use needs. As the place manager for Marina Bay, we promote exciting activities within Marina Bay in collaboration with other government agencies and private stakeholders. To create an exciting cityscape, URA also actively promotes architecture and urban design excellence.

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