



CENTRE for  
**LiveableCities**  
SINGAPORE

# Building Partnerships, Enhancing Capabilities



## Message by Advisory Board Chairman, Liu Thai Ker

Singapore's achievements in urban governance and planning over the past five decades have inspired government leaders, urbanists and communities around the world. Consequently, since it was established in 2008, the Centre's work has focused on four main areas—Research, Capability Development, Knowledge Platforms and Advisory. Through these activities, the Centre seeks to gather knowledge to help make cities more liveable and sustainable. In the process, we have also broadened our global partnerships, built networks to facilitate the study of urban issues and shared insights internationally.

Research into Singapore's urban planning and development experience remains key to the Centre's work. In our ninth year, we continued to focus on documenting the city's urban development experiences in our Urban Systems Studies series. We also explored urban challenges and innovative solutions in other parts of the world, and shared this knowledge through think pieces, reports, articles and books. We continued our collaborations with more than 30 ministries and statutory boards in order to ensure our research efforts are interdisciplinary and wide-reaching. To test the application of selected ideas, we worked with experts and partners to undertake surveys and pilot studies.

Our local Capability Development Programmes continued to grow to help Singapore's civil servants understand the principles behind Singapore's urban development journey and discuss current challenges. Internationally our Capability Development Programmes were extended to 12 African countries. To date, our Programmes have reached out to 3,824 people in 69 countries. At the same time, we have extended our Advisory Services to India, Sri Lanka and Indonesia and, more recently, Myanmar and Bhutan.

The Centre's flagship event, the two-yearly World Cities Summit, continues to actively share the knowledge we have gathered. In 2017, the World Cities Summit Mayors Forum and Young Leaders Symposium in Suzhou, China attracted 60 participants from 54 cities. In 2018, we look forward to welcoming 22,000 total participants at the 6th World Cities Summit, the 9th Mayors Forum, the Lee Kuan Yew World City Prize Lecture and Forum, the ASEAN Smart Cities Network Inaugural Meeting and other co-located events such as Singapore International Water Week and CleanEnviro Summit Singapore.

As the Centre approaches its 10th anniversary, we remain committed to advancing our mission through deeper engagement with our partners and greater efforts to reach a wider audience with our knowledge sharing. The Centre's activities have greatly benefitted from the contribution of our Advisory Board, stakeholders, fellows, experts, partners and staff. I thank them for their efforts and dedication in making our Centre an organisation that continues to bring value to Singapore and other global cities striving for liveability and sustainability.

As the Centre approaches its 10th anniversary, we remain committed to advancing our mission through deeper engagement with our partners and greater efforts to reach a wider audience with our knowledge sharing.



## Message by Executive Director, Khoo Teng Chye

The Centre for Liveable Cities continues to broaden its global partnerships, build networks, gather deeper insights into complex urban ecosystems, and study ways to foster sustainable living. This report, themed *Building Partnerships, Enhancing Capabilities*, highlights the Centre's key achievements in its ninth year.

We engaged in applied **Research** projects to devise new strategies for inclusive development and study pressing urban issues. To support elderly communities in Singapore, we studied assisted living to pilot better methods for encouraging communal integration in assisted living communities.

With five new Urban Systems Studies, the Centre continued to document Singapore's developmental journey in relation to waterway assets, land management, integrating arts and culture, and market-oriented pricing mechanisms for scarce resources such as land and water. A new project in partnership with the Seoul Institute yielded *Planning for Communities: Lessons from Seoul and Singapore*, a joint publication discussing community-engagement strategies in both cities.

Our Visiting Fellowship Programme hosted 10 distinguished researchers and practitioners who shared their expertise and collaborated with us on research. Alexandros Washburn, former chief urban designer of New York City, joined discussions on innovation districts, and representatives from China's National Development Reform Commission shared insights on social and urban governance.

The Centre's **Advisory** work spanned from Beira Lake in Colombo, Sri Lanka, to training officials in Jakarta in traffic management, and included the continuation of our work on developing a new capital city in the Indian state of Andhra Pradesh. **Capability Development** Programmes included the inaugural Singapore UN-Habitat International Leaders in Urban Governance Programme, which brought together 42 representatives from 12 African countries for CLC's first dedicated capacity-building programme on sustainable urbanisation for African cities.

The Centre hosted the 8th Leaders in Urban Governance Programme (LUGP) for senior high-performing Singapore public service officers; the 11th and 12th Executive Development and Growth Exchange Programmes (EDGE) for young public service officers; and the City Executive Leaders Programme (EXCEL), a practitioner-led milestone. These courses encourage intersectoral learning to enrich innovative thinking in local public service officials.

We continued to use our **Knowledge Platforms** to synthesise and share research findings, attract new ideas and encourage different perspectives. We held fruitful discussions and heard inspiring stories from likeminded friends and partners at the World Cities Summit Mayors Forum and the Young Leaders Symposium in Suzhou, China.

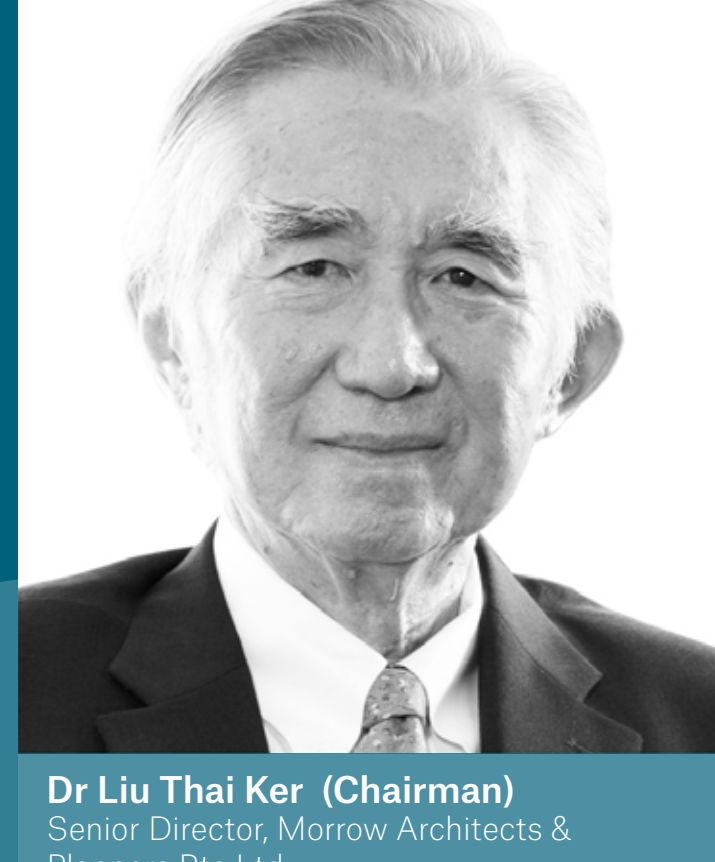
The Centre's work continued to be accessible through our publications, website and social media channels. Our Urban Solutions magazine, which shares city leaders' insights and practices, addressed themes of public spaces and inclusive urban regeneration, and featured interviews with leading urban designer Jan Gehl and urban studies theorist Richard Florida. We also launched our first Chinese-language publication, increasing accessibility for Mandarin-speaking city planners and colleagues. The CLC Lecture Series continued to spark questions and knowledge sharing, allowing for in-depth discussions regarding our collaborative research.

As the Centre prepares to mark its first decade, we will keep building our research, knowledge-sharing platforms, advisory projects and capability development programmes, and seek new perspectives and insight at the World Cities Summit 2018. We look forward to continuing collaborations with key partners such as the Urban Land Institute and the Development Research Center of the State Council of the People's Republic of China. We are honoured to gather and share knowledge from our partners, advisors, stakeholders, experts and staff, and will endeavour to further our collaborative approach to learning and growth.

The Centre for Liveable Cities continues to broaden its global partnerships, build networks, gather deeper insights into complex urban ecosystems, and study ways to foster sustainable living.



# Advisory Board



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Dean, School of Design & Environment, National University of Singapore



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Director, Wheelock Properties Singapore



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**Mr Peter Ho**  
Chairman, Urban Redevelopment Authority



**Mr Lim Chee Onn**  
Senior International Advisor, Ascendas-Singbridge Pte Ltd



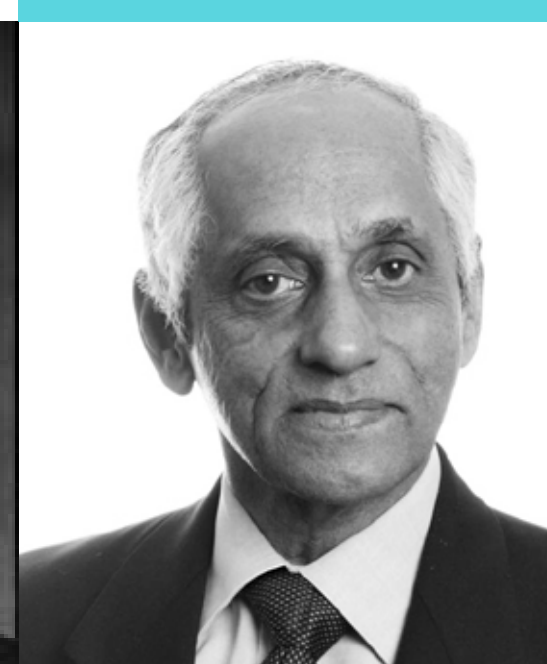
**Mr David Lim Tik En**  
Director, Wheelock Properties Singapore



**Mr Mah Bow Tan**  
Chairman, Global Yellow Pages Limited



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Adjunct Professor, Lee Kuan Yew School of Public Policy, National University of Singapore



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**Dr Tan Chin Nam**  
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Special Advisor, PUB, Singapore's National Water Agency



**Mr Tan Yong Soon**  
Adjunct Professor, Lee Kuan Yew School of Public Policy, National University of Singapore



**Professor Aino Wong**  
Chancellor, Singapore University of Social Sciences



**Mr Philip Yeo**  
Chairman, Spring Singapore

# Fellows



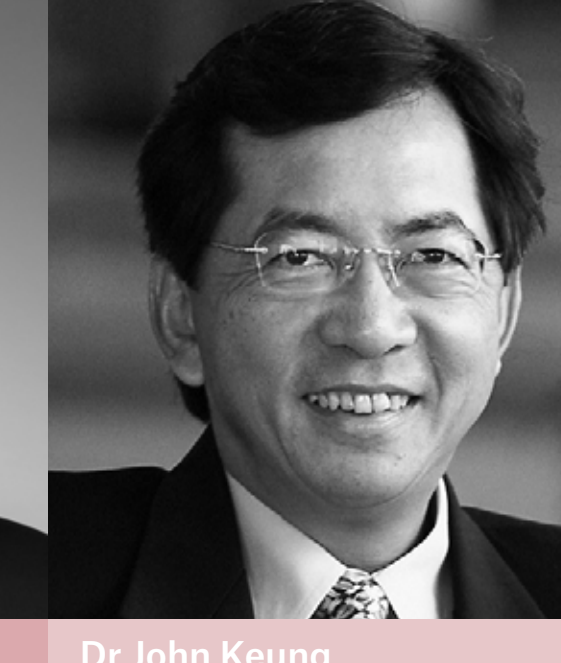
**Professor Paul Cheung**  
Professor of Social Policy and Analytics, Lee Kuan Yew School of Public Policy, National University of Singapore



**Mr Chionh Chye Khye**  
Former Executive Director, Council for Estate Agencies



**Professor Heng Chye Kiang**  
Lum Chang Chair Professor, School of Design and Environment, National University of Singapore



**Dr John Keung**  
Dean, BCA Academy



**Mr Michael Koh**  
Former Chief Executive Officer, National Heritage Board  
Former Chief Executive Officer, National Art Gallery



**Professor Leo Tan Wee Hin**  
Director (Special Projects), Faculty of Science, National University of Singapore



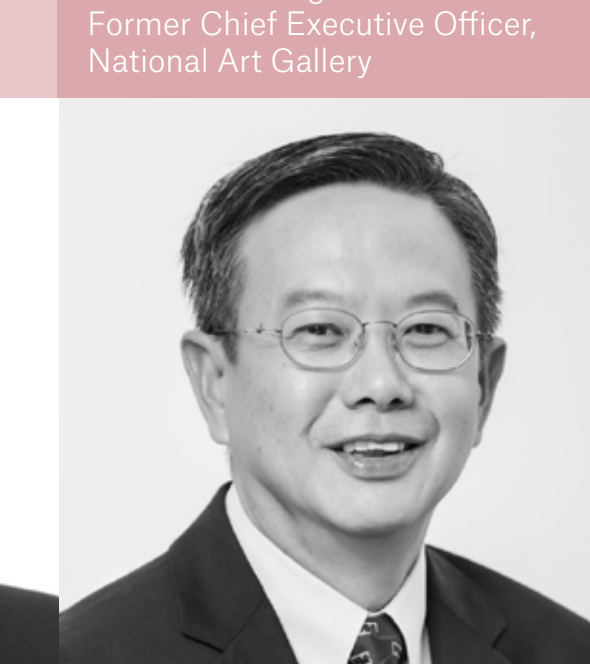
**Mr Lim Neo Chian**  
Chairman, Agri-Food & Veterinary Authority of Singapore



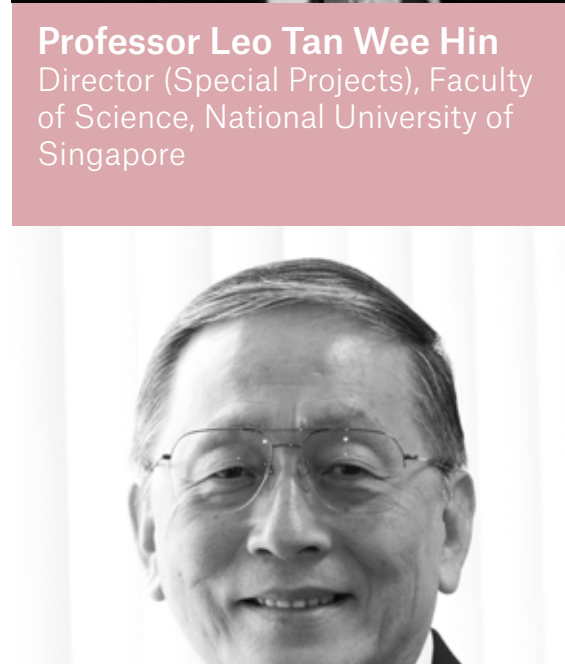
**Ms Low Sin Leng**  
Chairman, Nanyang Academy of Fine Arts



**Professor Lui Pao Chuen**  
Advisor, National Research Foundation, Prime Minister's Office



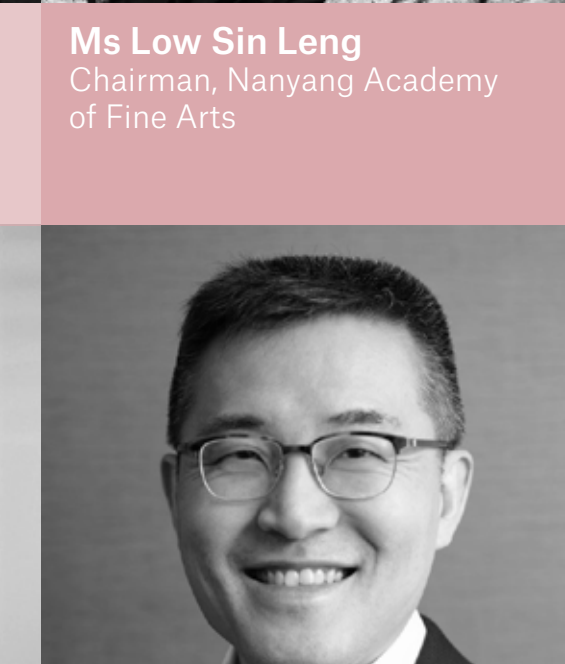
**Professor Neo Boon Siong**  
Canon Professor of Business, Dean, Nanyang Business School, Nanyang Technological University



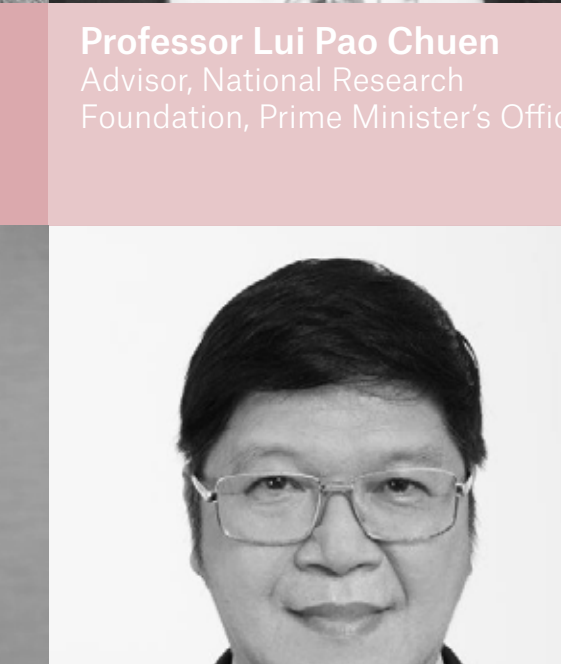
**Dr Ngiam Tong Tau**  
Chairman, Sky Urban Solutions Pte Ltd



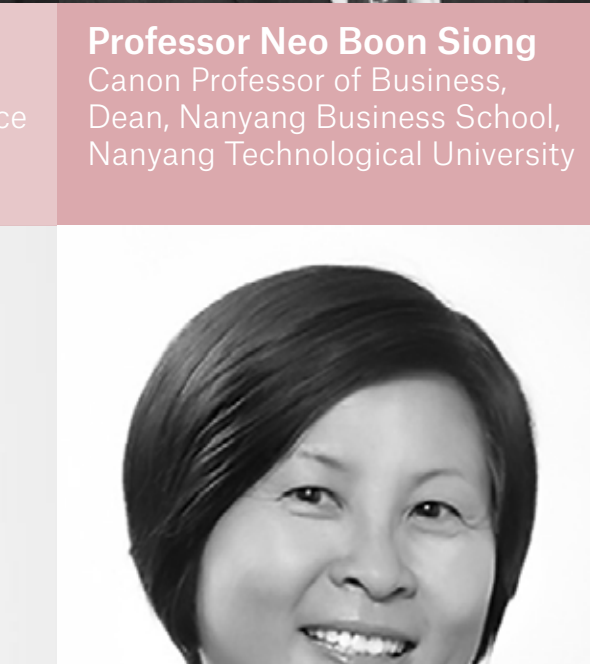
**Professor Phang Seck Yong**  
Vice-Provost (Faculty Matters), Singapore Management University



**Mr Andrew Tan**  
Chief Executive, Maritime and Port Authority of Singapore



**Professor Tan Kong Yam**  
Professor of Economics, Nanyang Technological University



**Ms Tan Poh Hong**  
Former Chief Executive Officer, Agri-Food & Veterinary Authority of Singapore

# Panel of Experts

- Marc Boey Kok Leong
- Chan Yoon Kum
- Choy Chan Pong
- Foo Chee See
- Foong Chee Leong
- Goh Hup Chor
- Prof. Gopinath Menon
- Jeffrey Ho
- Joseph Hui
- Khao Seow Poh
- Lau Joo Ming
- Pamela Lee
- Prof. Lee Sing Kong
- Dr Leong Chee Chiew
- Leung Yew Kwong
- Lim Chin Chong
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- Wilfred Loo
- Linda Low
- Low Tien Sio
- Ong Geok Soo
- Ong Seng Eng
- P Teva Raj
- Mohinder Singh
- Sng Cheng Keh
- Benedict Tan Chye Hup
- Tan Choon Shian
- Tan Siong Leng
- Tan Tian Chong
- Tan Yok Gin
- Wong Kai Yeng
- Yap Chin Beng
- Yap Kheng Guan
- Joseph Yee
- Yeo Yek Seng

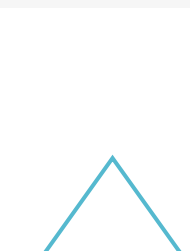
- Director, Far East International and Operations, Property Services
- Senior Consultant, PUB, Singapore's National Water Agency
- Former Senior Advisor, Urban Redevelopment Authority
- Director, SCP Consultants Pte Ltd
- Former Director-General Meteorological Services and Director of Pollution Control, National Environment Agency
- Former Deputy Chief Planner, Urban Redevelopment Authority
- Fellow, Institution of Engineers, Singapore
- Senior Director, Surbana Jurong Consultants Pte Ltd
- Principal Consultant, National Environment Agency
- Deputy Chief Executive Officer, National Environment Agency
- Senior Advisor, MOH Holdings Pte Ltd
- Senior Tourism Consultant, Singapore Tourism Board
- Vice President (Alumni and Advancement), Nanyang Technological University \*deceased May 2017
- Executive Director, National Parks, Gardens & Nature Reserves Cluster, Deputy Chief Executive Officer, Professional Development & Services Cluster, Commissioner of Parks and Recreation, National Parks Board
- Principal Consultant, KPMG Services Pte Ltd
- Former Deputy Chief Executive Officer of Sino-Singapore Tianjin Eco-city Investment and Development Co., Ltd
- Former Director (Streetscape), National Parks Board
- Former Deputy Chief Executive Officer & Director-General, National Environment Agency
- Former Senior Vice President (Planning), Jurong Consultants Pte Ltd
- Associate Professor, Singapore University of Social Sciences
- Former Advisor, Chairman's Office, Land Transport Authority
- Former Advisor, Chairman's Office, JTC
- Former Director (Waste and Resource Management), National Environment Agency
- Senior Director (Municipal Landscapes Division), National Parks Board
- Advisor, LTA Academy, Land Transport Authority
- Former Deputy Chief Executive Officer, Housing & Development Board
- Senior Advisor, Building & Construction Authority
- Chief Executive, Workforce Singapore
- Former Deputy Chief Executive Officer, Urban Redevelopment Authority
- Deputy Managing Director (Built Environment Research and Innovation Institute), Building and Construction Authority
- Deputy Chief Executive (Operations), PUB, Singapore's National Water Agency
- Former Group Director, Urban Redevelopment Authority
- Senior Advisor (Estate & Corporate), Housing & Development Board
- Former Senior Director, PUB, Singapore's National Water Agency
- Senior Consultant, Changi Airport Group
- Deputy Chief Executive (Economic Regulation Division), Energy Market Authority

# Stakeholder Agencies

Parent Ministries



Stakeholder Agencies





## World Cities Summit Mayors Forum and Young Leaders Symposium Suzhou, China 2017

### Advancements and Challenges of Cities: Planning And Governance

The 8th edition of the World Cities Summit Mayors Forum was held from 17 – 19 May 2017, in Suzhou City, Jiangsu Province. More than 60 mayors and city leaders from 54 cities at the forum made a declaration to work towards the shared vision of creating liveable, inclusive, harmonious, resilient, safe and sustainable cities through innovation and collaboration. The forum explored the possibilities underlying the trade-offs arising from urban planning, preservation of culture, and balancing growth with its impact to cities. A consensus formed around the idea that a stronger sense of culture and identity could provide more confidence for cities to venture forth and to try out new ideas.

The World Cities Summit Mayors Forum is an annual by-invitation-only event for mayors and city leaders. Together with the Lee Kuan Yew World City Prize, it is a key highlight of the biennial World Cities Summit, co-organised by Singapore's Centre for Liveable Cities and Urban Redevelopment Authority.



Mayors Forum leaders come together for networking to share best practices in urban development.

### Discussions

1

#### Advancements and Challenges of Cities: Planning and Governance

The capacity for city leadership must be developed at all levels, from the mayor to neighbourhood communities, and across all jurisdictions.

City planning has to balance institutional frameworks for participatory decision-making and public-private partnerships.

An international network like a "league of cities" would enable cities to share more insights on planning and governance.

Economic growth may be uneven, but development can still be inclusive. If planning takes a long-term view, is integrated and evidence-based, urban environments can be productive, green and highly liveable. Singapore, for example, is a model.

**VICTORIA KWAKWA**  
Regional Vice President  
(East Asia and the Pacific),  
The World Bank Group

2

#### Curating the City: Heritage and Culture

Heritage and culture are crucial to the development of all cities, and generate quantitative and qualitative benefits.

Promoting culture can help youth connect to their heritage, especially those in less well-resourced cities.

Cultural capital builds on social capital, which can be nurtured by promoting activities such as volunteerism.

Culture is essential to preserve the identity of the city, because it is a sector of opportunity for the economy and culture itself has important value to improve social cohesion.

**XABIER OCHANDIANO MARTINEZ**  
Councillor for Economic Development,  
Trade and Employment, Bilbao

3

#### The Tenacity of a City: a Resilient and Sustainable Environment

It is vital to know the public's needs and implement city plans to meet them.

A city plan cannot work unless it accommodates all community members. To avoid lapsing into unequal distribution of benefits, a favourable political environment should be maintained by earning the people's trust.

Heritage and culture should be protected before planning new areas.

The most important thing in city development is that the city leadership has to have the strong will to ask enterprises to cooperate.

**BARRY CHANG**  
Council Member and Former Mayor of  
Cupertino, California

4

#### Engines of Growth: Balancing Liveability with Growth

A key part of the growth strategy for any city is to "cherish the crown jewels"—what has made a city strong in the past.

As cities allocate space for amenities and activities for liveability, land must also be set aside for growth, such as innovation for industry.

Cities must do enough to retain their millennial, digital-native residents. Growing cities need talent, but not if the young cannot afford to live there.

Every city should get on the train towards the new economy with digital technology if you want to grow and stay liveable. If you miss the train, you will probably see your old business models crumble very quickly.

**BART DE WEVER**  
Mayor of Antwerp



Dialogue with Minister Mr Lawrence Wong, Minister for National Development, Singapore, served as the Chairman for the 2017 WCS Mayors Forum.



Mayors discussed collaborative initiatives to improve resilience in cities' built, natural and social environments.



Victoria Kwakwa, Vice President, East Asia and Pacific, World Bank and Marilyn Taylor, sharing insights on good governance and social networks during the 2017 WCS Mayors Forum.

### Young Leaders Discuss Heritage and Culture



Held alongside the World Cities Summit Mayors Forum, the World Cities Summit Young Leaders Symposium 2017 brought young leaders together as part of a growing community shaping the global urban agenda. The Symposium provided young leaders from government, academia and industry a unique platform to engage closely on the importance of heritage and culture. They discussed the balance between preserving and integrating the best from the past, while fostering a viable and meaningful future for all. The annual Symposium also presents young leaders an opportunity to seed new collaborations, form new friendships and strengthen old ones.

The World Cities Summit Young Leaders Symposium is an annual by-invitation-only event for young leaders from public and private sectors related to urban development and governance. The Symposium is a highlight of the biennial Mayors Forum and biennial World Cities Summit, co-organised by Singapore's Centre for Liveable Cities and Urban Redevelopment Authority.

Culture is ultimately about who we are and how we relate to one another.

**LAWRENCE WONG**  
Minister for National Development,  
Singapore

With technology... you can combine poetry and pragmatism together.

**DAAN ROOSEGAARDE**  
Founder, Studio Roosegaarde,  
The Netherlands

Culture is vital to the economy because it compels people to work towards a common goal.

**RUBY TEO SIEW KIM**  
CEO, Stallford Education Group,  
Singapore

Technology can enhance culture by recreating and preserving heritage, and thus, also modernising it to make it closer to the younger generation.

**JASON SI**  
Dean of Tencent Research Institute, China



Top left: Pang Yee Ean, Director-General (Investments) of the Asian Infrastructure Investment Bank (AIIB), moderating the WCS Young Leaders Symposium. Top right and Bottom: Young Leaders participate in site visits to explore urban planning projects in Suzhou.

### Key Insights



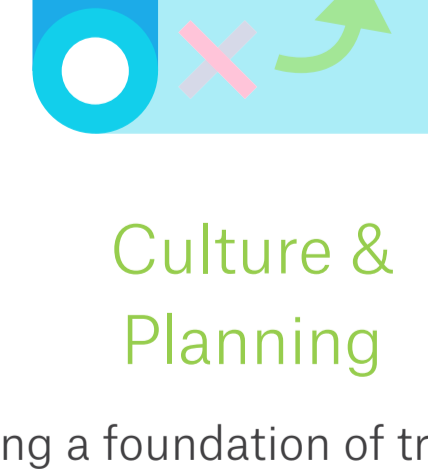
#### Culture & Economic Competitiveness

Culture can play a seminal role in spurring economic rejuvenation and growth. In Bilbao, Spain, focusing on aspects of culture in promoting new economic activities has helped the city to nurture more culture-related enterprises, which today make up 6% of Bilbao's businesses.



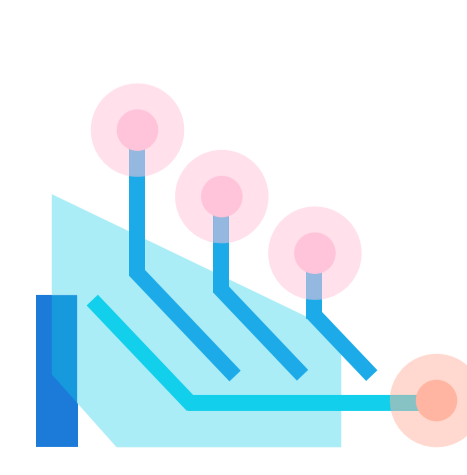
#### Culture & Development

Weaving culture with development is often a balancing act that calls for sensitivity, and innovation. For example, Chinatowns in cities such as New York, London and even Singapore need to be managed and renewed to help spur economic growth. On the other hand, when gentrification occurs, the process can easily lead to loss of character and displacement due to high rents.



#### Culture & Planning

Building a foundation of trust in the authorities can help pave the way for planning that balances culture with development. Strong motivations to protect heritage can block progress, as witnessed in Yangon, Myanmar, which lacked adequate heritage planning for three decades until the recent building of a new capital in Naypyidaw sparked interest in redevelopment.



#### Culture & Technology

Technology can help bring culture to the people in both concrete and abstract ways. In the Netherlands, clean-energy technology is promoting culture by beautifying cities while promoting environmental sustainability. One example is the Van Gogh Path near Eindhoven, a cycling path with magical ground lighting, inspired by the Dutch artist's painting Starry Night.



#### Culture & Internationalisation

Community members who are less exposed to diversity might be hesitant to embrace different cultures. To address this, cities should ensure organic blending of culture into city developments rather than trying to push immediate assimilation. This is critical in cities like Sydney and London where, despite decades of multiculturalism, communities are still segregated by geography.





## Building Amaravati Together

### CLC 'Deep Dive' Workshops to Shape a New City

In December 2014, the Governments of Singapore and Andhra Pradesh (AP) signed a Memorandum of Understanding (MoU) for the master planning and development of Andhra Pradesh's new capital city, Amaravati. The Centre's Executive Director, Khoo Teng Chye, was appointed by the Singapore Government as the Singapore representative to the Amaravati Capital City Advisory Committee. As part of the MoU, a consortium of Singapore companies comprising Ascendas-Singbridge and Sembcorp would submit a proposal to Government of AP to develop the seed area of Amaravati. The Centre would also provide capability development and advice on the institutional set-up of its urban planning and development functions and governance issues.

On 15 May 2017, the Singapore Consortium was given the Letter of Award as the master developer of the 6.84 sq km Start-Up Area in Amaravati, and a second MoU was inked between both governments, formalising the Joint Implementation Steering and Working Committees, amongst other commitments. Minister (Industry) S. Iswaran also co-chaired the inaugural Joint Implementation Steering Committee with the Andhra Pradesh Chief Minister N. Chandrababu Naidu. The first Joint Implementation Working Committee was held on 15 Jun 2017, where Mr Khoo laid out the Centre's continuing support on master plan review, infrastructure development, building up of urban-related institutions and training of Andhra Pradesh Officials.

The Centre has facilitated a series of workshops to share planning and development implementation practices with Andhra Pradesh officials. These "deep dive" trainings and discussions are building the frameworks for an Amaravati equipped with sustainable transport, water, power, construction, and waste control systems.



#### 1st and 2nd Workshops: July 2017

The first set of workshops in Andhra Pradesh centred on **Land Use Planning, Transport, Urban Design, Water Infrastructure, and Management and Development Promotion**. During the workshops, participants discussed setting up a master planning committee, planning provision standards, processes and applications, transport strategy, and urban design focus areas and guidelines. About 60 officials attended and concluded with a set of action plans for follow-up and tracking.



#### 3rd and 4th Workshops: October 2017

The third workshop focused on **Housing, Building Control & Precast Technology**, providing 69 government officials with skills trainings about green building, building information modeling, building plans management and control, and precast and prefab methods. The following workshop gathered 10 government officials for discussions regarding **Power Systems**, including topics such as network configuration, power generation, transmission and distribution, regulation of the energy market, and renewable energy.



#### 5th Workshop: January 2018

The fifth workshop focused on **Solid Waste Management** to discuss strategies for waste management at the regional and capital city levels, zoning for waste collection, waste segregation and recycling, appropriate technologies for waste collection, treatment and disposal, waste minimisation and hazardous waste. Over 25 officials attended and concluded with a set of final outcomes and recommendations.



Participants learned about sustainable development strategies from experts during deep dive workshops in Andhra Pradesh.

### Land Owners' Study Visit in Singapore

In November 2017, farmers and landowners from Andhra Pradesh were sent on a trip to learn about Singapore's urban development. The trip aimed to inspire them to develop their allocated plots with holistic integration of commercial facilities and community spaces.

At Bishan-Ang Mo Kio Park, the farmers learned about the value of green spaces amidst high-density living, which can serve as both utilitarian flood measures and social community spaces. They also toured the Serangoon Gardens precinct and the Ang Mo Kio housing estate to understand Singapore's different housing typologies and to experience firsthand how retail, services and community facilities such as clinics, childcare centres and libraries coexist in housing precincts.



Andhra Pradesh farmers experienced pieces of Singapore's urban transformation through hands-on learning journeys.

While a clear vision is essential to inspire and unite otherwise disparate efforts, working together is what will ultimately yield results on the ground in a timely manner. As each group of investors and developers works with government agencies and other institutions in Andhra Pradesh to build Amaravati, close collaboration and integration of efforts is the key to collective success...Singapore and our companies are fully committed to this partnership with you, your team and the people of Andhra Pradesh.

**S ISWARAN**  
Minister of Trade and Industry (Industry),  
at the Letter of Award For Master-Developer of  
Start-Up Area & signing of government-to-government  
MoU, Vijayawada Amaravati, 15 May 2017





## Research on Piloting Assisted Living

Singapore is ageing more quickly than most developed cities, with the number of seniors (aged 65 and above) projected to reach 900,000 by 2030, more than double the number of seniors today. At the same time, more seniors are living alone, the old-age support ratio is declining, lifespans are increasing and there is an increasing prevalence of seniors with chronic illnesses, dementia. With a shrinking workforce and changing family structures, traditional forms of familial support are proving insufficient. Also, not all seniors needing some form of eldercare are suited for nursing homes, which are designed for the severely frail. Seniors who move into nursing homes prematurely due to a lack of intermediate care options are denied many years of living with relative independence.

To address this pressing issue, the Centre spearheaded a Piloting Assisted Living study focused on potential housing options for seniors in Singapore. Based on insights gained through qualitative research, international case studies and a multi-stakeholder workshop, the study made recommendations on how agencies could work towards Piloting Assisted Living in Singapore.

### A Rapidly Ageing Singapore



A key benefit of Assisted Living is that it allows seniors who are starting to experience physical or cognitive decline to avoid a binary choice between struggling to cope at home and checking into a nursing home.

**CLC INSIGHTS ON ASSISTED LIVING**

What is visibly lacking in the current housing landscape in Singapore, particularly public housing, is a housing option that can cater to future seniors who are more independent, more likely to live alone or with their spouses, and requiring some form of care and assistance as they age.

**CLC INSIGHTS ON ASSISTED LIVING**

### Research Methodologies

#### CLC Insights on Assisted Living



The Centre produced an Insights commentary to highlight the gaps in Singapore's elderly housing options and explore the potential for Assisted Living in Singapore. Image: Ministry of Health, depicting a Lions Befrienders volunteer and senior from their Befriending service.

The Centre composed an Insights piece to highlight the gaps in Singapore's elderly housing options and explore the potential for assisted living in Singapore.

#### Qualitative Study: Ageing in the Heartlands

- Unable to afford or does not want to pay for current options
- Retired, over 65, relatively healthy but with one minor chronic illness
- Needs or desires a more qualified caregiver
- Has a family member who is their primary caregiver

Characteristics of a potential Assisted Living resident based on CLC's qualitative study.

The Centre embarked on further research to study everyday living patterns and ageing aspirations of seniors in two typical HDB towns, Redhill and Jurong West. The qualitative study interviewed over 180 seniors.

#### International Case Studies



To learn from best practices abroad, the CLC team visited and analysed case studies of assisted living facilities in Osaka, Japan and an integrated facility in New York, USA.

#### Multi-Stakeholder Workshop

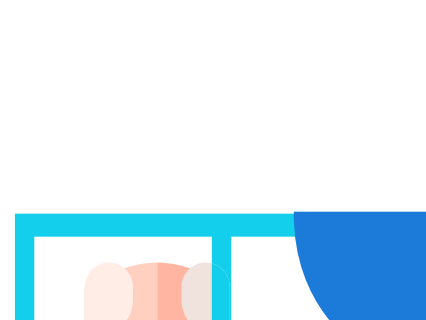


CLC Executive Director Mr Khoo Teng Chye opening the multi-stakeholder workshop which gathered over 60 participants from urban, healthcare and social sectors to discuss piloting Assisted Living in Singapore.

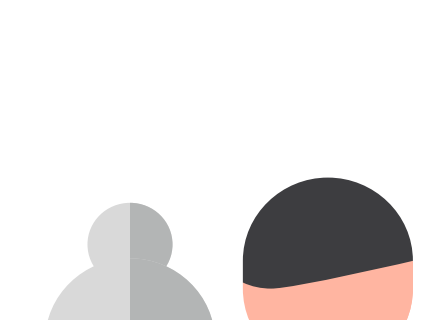
The Centre convened a multi-stakeholder workshop, gathering participants from the Ministry of National Development (Housing Division), the Ministry of Health (Ageing Planning Office), the National University Health System (NUHS), the Housing & Development Board (HDB), NTUC Health and NTUC Social Enterprises.

### Key Findings

Piloting Assisted Living found that



Most people would like to age-in-place and plan on remaining independent.



Current caregiving options are highly dependent on foreign domestic workers or institutionalised settings such as nursing homes.



Primary caregivers to the elderly face financial burdens and obligations, especially those unable to afford foreign domestic workers.



A model where seniors sell or sublet their existing flat to finance their stay in an assisted living unit can make these transitions generally affordable.



It is important to preserve the privacy and autonomy of seniors even as they age.

### Key Recommendations and Outcomes

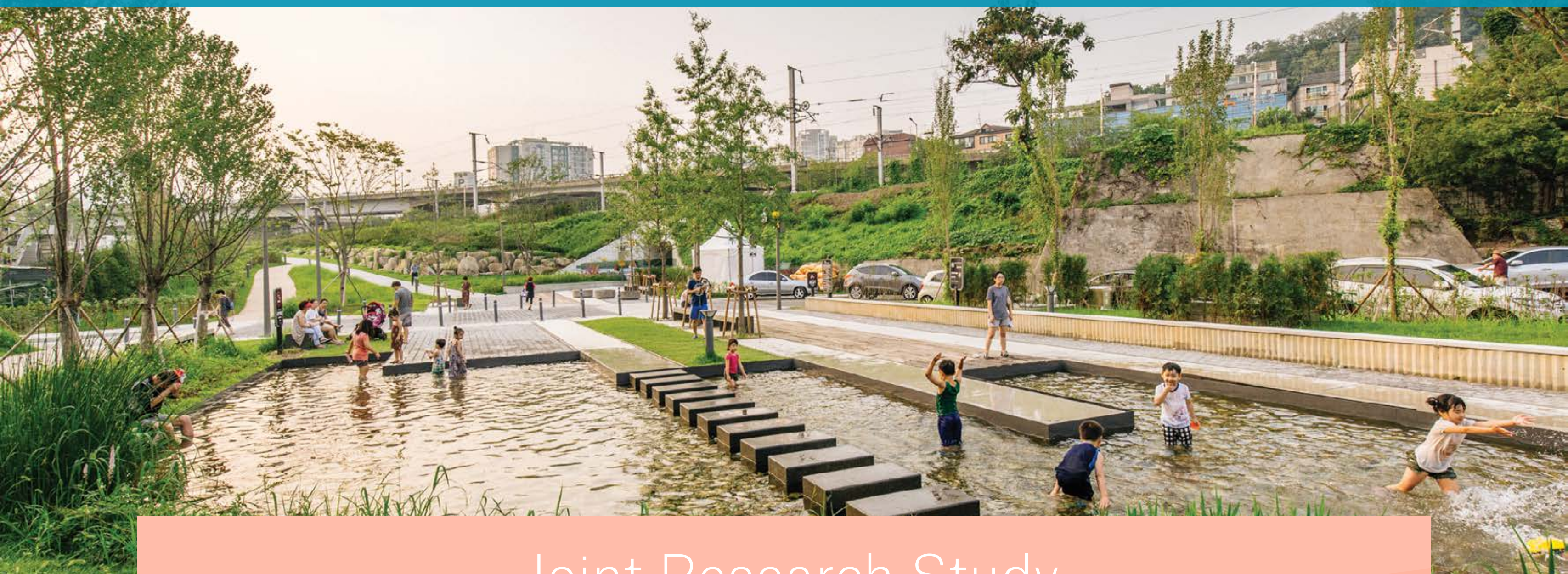
Through the Piloted Assisted Living research study, the Centre saw how assisted living can bridge the gap between residential and medical institutions, as well as provide options for middle-income seniors. The Centre recommended piloting assisted living in public housing estates for seniors who are still fairly independent but require some assistance as they age.

The Centre's Piloting Assisted Living: Research and Workshop Insights Report was circulated to the Ministerial Committee of Ageing (MCA), and the Ministry of National Development (MND) and the Ministry of Health (MOH) announced in 2018 that agencies are studying and working towards a pilot.

We have introduced better designs for elderly-friendly estate and flats... Beyond better integration, we will go further by exploring Assisted living... a model of living that integrates home and care. For example, within one block or even on the same floor, you can have individual apartment units together with shared communal facilities for dining, social activities, and a range of eldercare services. HDB will be working with MOH to pilot assisted living in public housing.

**LAWRENCE WONG**  
Minister for National Development,  
Speech at Committee of Supply (2018)





## Joint Research Study with Seoul Institute on Planning for Communities

*Planning for Communities: Lessons from Seoul and Singapore* is the second joint research publication produced by the Centre for Liveable Cities and the Seoul Institute as part of a research collaboration established in 2016. Since 2015, the Centre and the Seoul Institute have been working together to share knowledge from Singapore and Seoul—both high density and highly developed Asian metropolises—on topics of mutual interest that contributes to urban liveability and sustainability. The second joint publication features in-depth case studies from Singapore and Seoul on citizen participation initiatives for development processes, and distills lessons on how collaborative approaches with the community can generate better planning outcomes for all.

After achieving significant progress in urban development through government-led initiatives during the rapid growth in the post-war period, Singapore and Seoul are now seeking more bottom-up approaches to urban governance. In Seoul, citizens are given an active role to draft policy and urban planning documents, ranging from the comprehensive Seoul Plan 2030 to community-level neighbourhood design. In Singapore, local improvement programmes like the Neighbourhood Renewal Programme provide a platform for the community to have a say in renewing their neighbourhood, while extensive community engagement processes have been introduced for major projects like the “Rail Corridor” to encourage greater community ownership and ensure that outcomes remain relevant for the residents.

People see a relevance because whatever happens in their neighbourhoods affect[s] their daily lives. That is the key motivation we can tap on: people’s desire to participate in issues they care about—whether it is gardening, cycling, or converting carparks into green spaces. To spur participation, we provide accessible platforms to encourage conversations about the neighbourhood. We are keen to engage ‘extreme’ users such as seniors and kids, who are typically not involved in decision-making processes and are less likely to voice their concerns at town hall dialogues.

**MIZAH RAHMAN**  
Director and Co-founder,  
Participate In Design, Singapore

One of the reasons citizen involvement in the Seoul Plan 2030 process was successful was that each stakeholder benefitted from the process. Citizens felt rewarded for contributing to the development of their own hometown. The Seoul Metropolitan Government had confidence that the Seoul Plan 2030 would succeed as a feasible master plan. Experts had an opportunity to be part of a new initiative to involve citizens in a policy-making process.

**INHEE KIM**  
Senior Research Fellow,  
The Seoul Institute

For this study, the Centre and The Seoul Institute formed a joint research team that included representatives from Singapore’s Housing and Development Board, People’s Association, Ministry of Culture, Community and Youth’s Office for Citizen Engagement, and the Urban Redevelopment Authority. The team visited locations in Singapore in December 2016 and in Seoul in February 2017, and held in-depth discussions with city planners and officials, local activists and community representatives involved in the respective programmes. It also interviewed key policymakers, non-governmental organisations and community volunteers. These interactions yielded valuable insights for promoting equitable and efficient citizen participation methodologies.



Top left: Seoul Institute researchers and Singapore participants from the public sector and academia engaged in a roundtable discussion on community participation for planning. Top right: Singapore study trip delegates, comprising of officers from HDB, PA, MCCY and CLC, visited a community-run space at a local (dong) level administrative office. Bottom left: Singapore study trip delegates explored the Gyeongui Line Forest Park, a former rail line transformed into a public park with active involvement from existing communities. Bottom right: Community participatory workshop for neighbourhood renewal project in Singapore. Image: Participate In Design

### Key Findings

How can governance and planning frameworks facilitate community involvement?



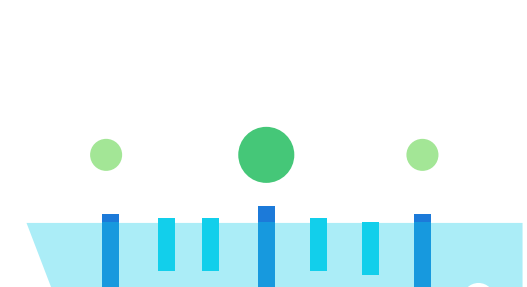
Creating a system that can align governmental stakeholders is essential before citizens can participate in urban planning processes.



Transparency builds trust between the government and citizens.



The planning framework needs to ensure that feedback collected through engagement is translated into action.

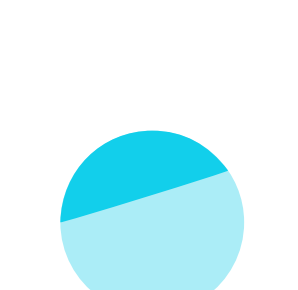


Incorporating more detailed district-level local plans creates better opportunities for community involvement.



Well-established resident organisations anchor extensive community networks.

How can community involvement processes generate better outcomes?



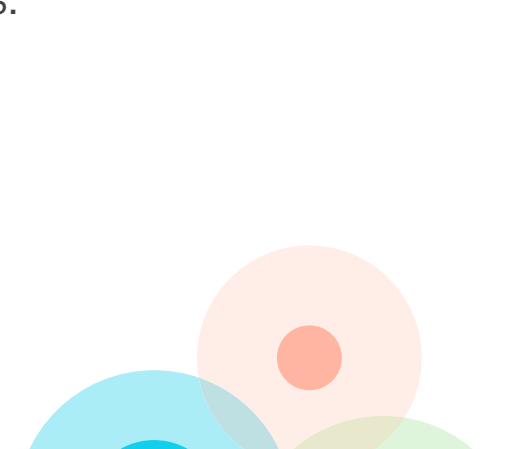
Involving experts in community engagement bridges the gap between local needs and technical planning considerations.



Giving citizens decision-making powers empowers residents to solve their own problems.



Community planning processes should provide platforms for residents to resolve differences to facilitate informed decision-making.

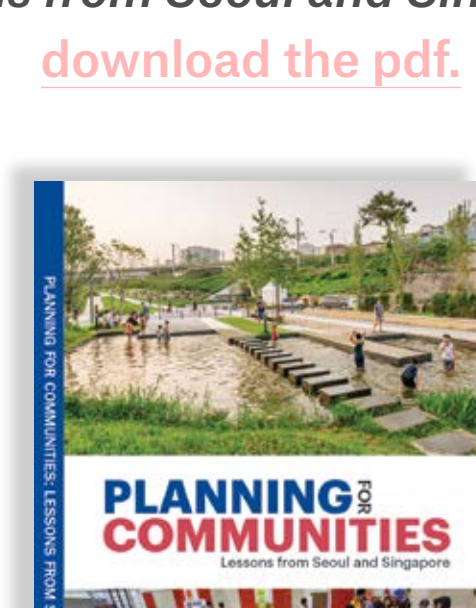


Reaching out to diverse communities ensures inclusivity in planning outcomes.



With successful community involvement, planning processes can build stronger social bonds and mutual trust.

To learn more about *Planning for Communities: Lessons from Seoul and Singapore*, [download the pdf.](#)



# RESEARCH



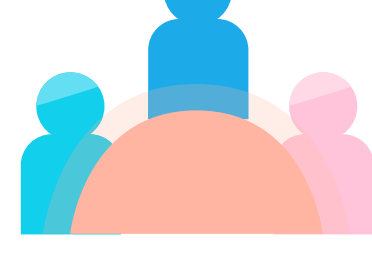
94

Interviews



5

Published Urban Systems Studies



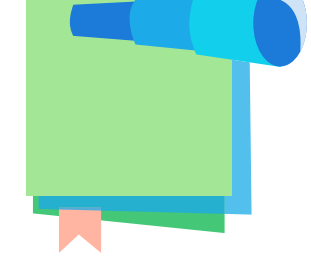
5

Workshops/ Roundtables



10

CLC Insights Articles



6

Forward-Looking Research Projects and Publications

The Centre's research work this year yielded five Urban Systems Studies publications, utilising knowledge garnered from urban development pioneers and experts on Singapore's progress. In addition to documenting Singapore's transformation, we continue to study how to apply the lessons learned to urban issues. With our CLC Insights articles, forward-looking research projects and publications, we aim to catalyse innovation and new ways of thinking to move towards a healthy, equitable, and sustainable urbanised future. Through collaborations with visiting fellows, global research institutions, and communities around the world, our growing network of leaders can share solutions that adapt to changing urban ecosystems.

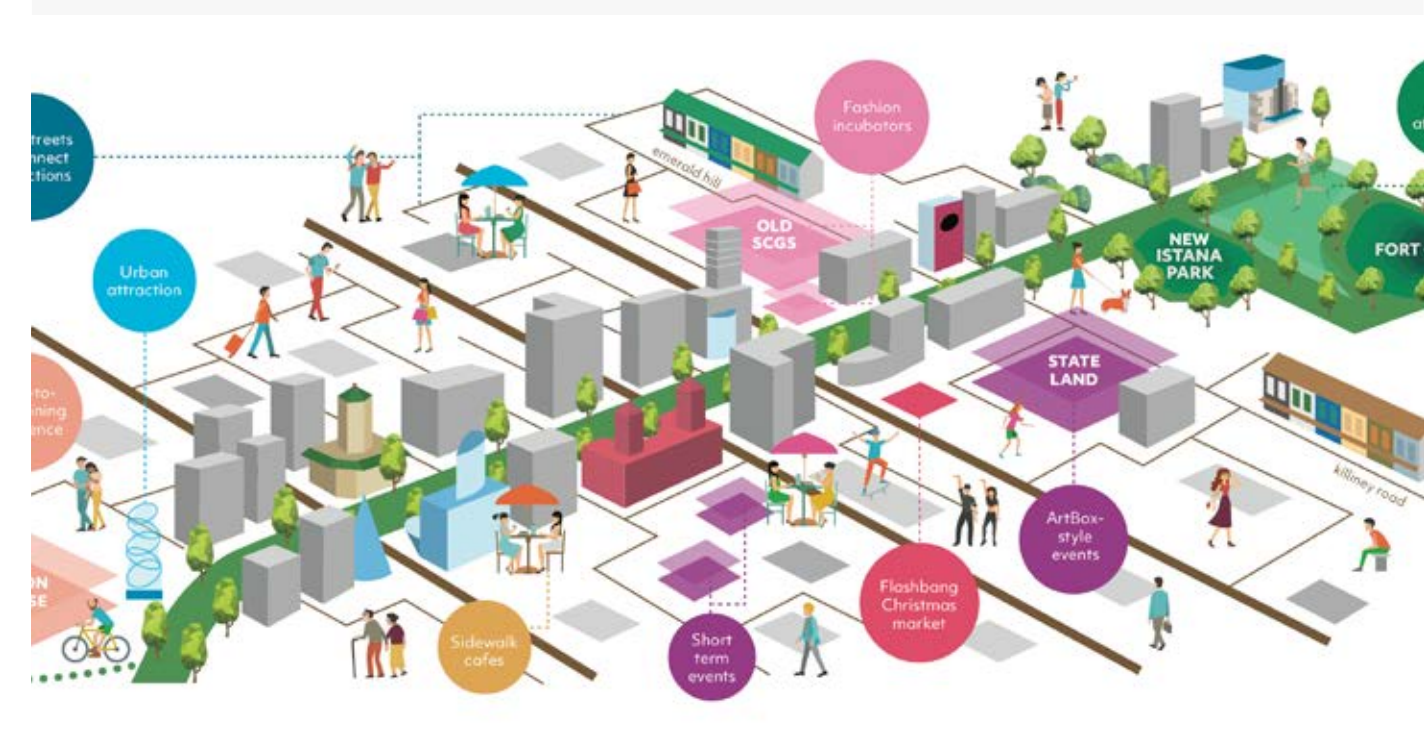
## Research Projects

### Urban Mobility: 10 Cities Leading the Way in Asia Pacific



Seoul, Shanghai, Singapore, Suwon, Taipei, Tokyo, Bandung, Ho Chi Minh City, Sydney and Yangon—each have their unique urban mobility challenges. Yet, they share a common goal: to establish a sustainable mobility system. *Urban Mobility: 10 Cities Leading the Way in Asia-Pacific* highlights 10 case studies of cities in this rapidly-growing region that lead the pack in employing innovative solutions. This interactive e-publication, produced jointly by the Centre and the Urban Land Institute (ULI), presents bold attempts by these cities to transform the way people live, play and move. Since its launch at the 2017 ULI Asia Pacific Summit, the publication has been shared by several international channels including BCI Asia, The Edge, Eco-Business and Yahoo.

### Reimagining Orchard Road



From July 2016 to April 2017, the Centre conducted a joint study of Orchard Road with architectural firm WOHA and the National University of Singapore's School of Design and Environment. The study proposed two big ideas to improve pedestrian experience in the area. The first was to implement car-lite measures to open up spaces for visitors on foot, shifting the paradigm from vehicles to people, and from driving to walking. The second was to increase Orchard Road's depth and richness by connecting it to side lanes and neighbouring precincts, as well as activating existing spaces along the street for diverse activities.

### Strengthening Singapore's Resilience



As part of Singapore's participation in the 100 Resilient Cities (100RC) network, the Centre is collaborating with 100RC and relevant stakeholders to develop a publication that examines how the city-state has approached and built its resilience against potential shocks and stresses. In January, a diverse range of stakeholders engaged in a workshop to discuss the gaps, opportunities and actions on two identified challenges: Climate Change and Changing Demographics. Key themes discussed include the need for more effective engagement of stakeholders, impactful collaborations and actions among stakeholders, and a better understanding of the links between challenges.

## Research and Collaboration with Visiting Fellows

The Centre hosted and collaborated with 9 distinguished researchers and practitioners under the CLC Visiting Fellowship Programme. The programme strengthens the Centre's ties with like-minded experts and deepens our body of knowledge on sustainable and liveable cities to jointly create urban solutions.



**Peter Rowe**  
(June and August 2017)

Raymond Garbe Professor of Architecture and Urban Design; former Dean, Harvard Graduate School of Design

During two visits, Prof Rowe conducted site visits and interviewed senior officers and practitioners from the HDB, URA, PUB and NParks, as well as private sector leaders for a CLC-GSD joint publication on Singapore's green-blue developments (forthcoming).



**Emi Kiyota**  
(July 2017)

Environmental gerontologist and organisational culture change expert; President and Founder, Ibasho; Bellagio Fellowship Awardee, Rockefeller Foundation

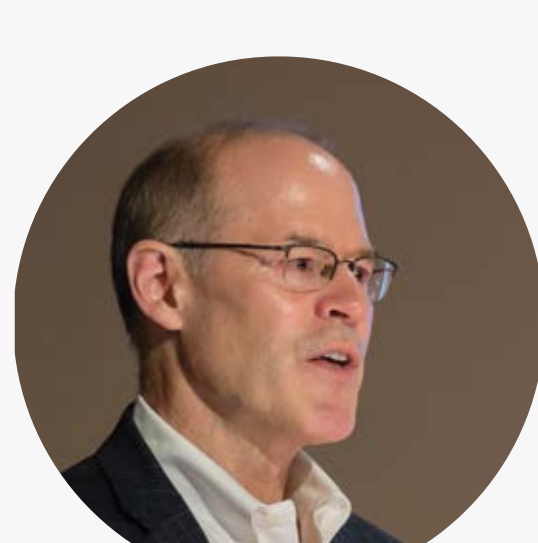
Prof Kiyota facilitated a multi-stakeholder workshop on piloting assisted living in Singapore and shared her insights regarding best practices for elderly care.



**Marilyn Taylor**  
(July 2017)

Professor of Architecture and Urban Design (Current), Former Dean (2008-16), University of Pennsylvania School of Design

Prof Taylor chaired the multi-stakeholder "Great CBD of the Future" workshop to discussing lessons from planning Marina Bay and provided inputs on detailed planning and design of two pilot sites in WIA. An interview with her was published on the Centre's social media platforms and newsletter. She also delivered a CLC public lecture on "Cities Taking the Lead".



**John Macomber**  
(September 2017)

Senior Lecturer of Business Administration, Harvard Business School

Macomber discussed CLC's advisory work in India's Andhra Pradesh state and Sri Lanka's Beira Lake, and the Harvard Business School case study, *Enterprise-led, Government Supported New Cities: A Financial Framework*, with the CLC team. An interview with him was published on the Centre's social media platforms and newsletter. He also delivered a CLC public lecture on "Financing Sustainable Cities".



**Cai Changhua (pictured), Zhang Yuxian and Wang Qingyun**  
(November 2017)

Zhang Yuxian and Wang Qingyun are Directors General of the Institute of Economic System and Management under China's National Development and Reform Commission (NDRC). Cai Changhua is a Deputy Director General at the NDRC.

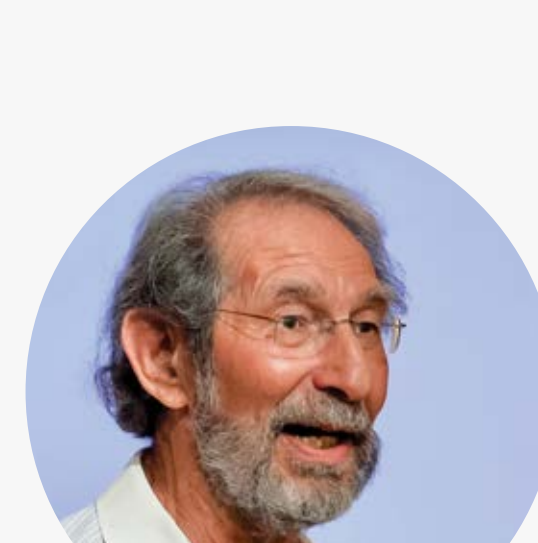
The NDRC representatives facilitated a CLC-NDRC Lecture on social and urban governance and wrote a corresponding CLC Insights piece. This visiting fellowship is a key deliverable of the MND-NDRC MoU signed in 2015.



**Alexandros Washburn**  
(November 2017)

Former Chief Urban Designer, New York City; leader of the planning firm DRAW Brooklyn LLC

Washburn conducted a multi-agency workshop and design review on the planning of the north district. He also led a sharing session with Singapore and facilitated agencies on innovation districts and wrote a corresponding CLC Insights piece.



**Geoffrey West**  
(March 2018)

Distinguished Professor, Former President, Santa Fe Institute; Associate Fellow, Green-Templeton College, Oxford University; Visiting Professor, Nanyang Technological University

Prof West advised an inter-agency project team on a complexity studies project, shared insights from his book *Scale in a CLC* interview, and delivered a public lecture "Scale: The Complex Science of Cities" on how laws of physics govern growth in cities and in business.





# CAPABILITY DEVELOPMENT AND ADVISORY

## Local



17  
No. of Programmes



4.54  
Average Ratings of Programmes

## International



20  
No. of Programmes



4.57  
Average Ratings of Programmes

## Capability Development

The Centre continues to bring together growing numbers of Singapore and international city leaders for experiential learning that bolsters their skills and updates their knowledge bases. In addition to applying the Singapore Liveability Framework to distil the country's development journey, capability development programmes enable participants to gain a better understanding of policy via learning journeys and site visits. Participants collaborate with the Centre's Panel of Experts, formulate action plans and devise strategies to improve their own cities and communities.

### 8th Leaders in Urban Governance Programme (LUGP)



Participants experienced first-hand the mobility constraints faced by seniors, courtesy of TOUCH Caregivers Support at Ang Mo Kio.

The 8th LUGP programme provided 26 senior high-performing Singapore public service officers with four weeks of enrichment to learn about the principles, considerations and constraints underpinning the nation's urban transformation. The programme adopts a cross-sectoral, cross-disciplinary and integrated learning approach, tapping on the Centre's knowledge products and networks to build new solutions for current issues and challenges. Participants travelled to Suzhou, Shanghai, Beijing and Tianjin, drawing parallels with Singapore's urban transformation.

### City Executive Leaders Programme (City EXCEL)



EXCEL participants visited Bishan-Ang Mo Kio park to learn about the redevelopment of the wetlands to improve access to the Kallang River.

City EXCEL is a five-day practitioner-led, project-based programme co-organised by the Centre and the Building & Construction Authority Academy. It is a milestone course for all MX13-MX10 officers with more than 1 to 2 years of experience in the Infrastructure and Environment sector and associated agencies. In the past year, the programme has provided structured sectoral training and development for 320 civil servants, sharing knowledge on Singapore's experiences in urban development and governance.

### 11th and 12th Executive Development and Growth Exchange Programme (EDGE)



Participants walked around Little India to experience how Singapore's current planning strategies impact its foreign workforce.

The 11th and 12th EDGE programmes enabled 58 young high-performing Singaporean public service officers to understand the principles underlying the country's urban development by identifying and discussing its key current issues and challenges.

Programme participants engaged with urban pioneers and public sector leaders, bolstering their public service potential. They also went on overseas trips to contrast Singapore's urban development with Yokohama, Tokyo, Seoul, London and Rotterdam.

### 6th Temasek Foundation International Leaders in Urban Governance Programme (TFiLUGP)



In addition to working on urban challenges specific to their own countries, governmental officials shared best practices and innovative ideas with their international counterparts.

TFiLUGP's 6th run hosted 33 city leaders and senior officials from eight countries. Partnering with the Temasek Foundation International, the five-day mayoral programme brought together 12 teams from Bangladesh, Bhutan, Cambodia, China, Indonesia, Malaysia, Philippines and Uzbekistan, and CLC experts to discuss urban challenges and formulate action plans.

### Singapore UN-Habitat International Leaders in Urban Governance (SG UN-Habitat iLUGP)



Leaders visited Toa Payoh HDB town and discussed the history of public housing in Singapore, transport integration and community spaces.

Some 42 participants from 14 cities in 12 African countries visited Singapore from 5 - 9 June 2017 for the inaugural SG UN-Habitat iLUGP. This was the Centre's first dedicated capacity-building programme on sustainable urbanisation for African cities, and its maiden partnership with UN-Habitat.

Supported by the Ministry of Foreign Affairs (MFA), the programme is a contribution to the New Urban Agenda set at the October 2016 Habitat III UN conference and, specifically, Sustainable Development Goal (SDG) 11, which outlines the target to "make cities and human settlements inclusive, safe, resilient and sustainable".

### Latin-Asia Business Exchange Programme (LABX)



Participants visited Woodlands MRT station as a case study of Singapore's integrated transportation hubs.

Cross-pollinating ideas and forging ties, the Centre hosted mayors and government leaders from Argentina, Brazil, Ecuador and Mexico as part of the LABX. During the week-long immersion, they learned from Singapore's urban development experience—particularly in mobility, urban planning, waste and water infrastructure, and financing. The LABX was co-organised by the Centre, Enterprise Singapore (formerly International Enterprise Singapore) and the Development Bank of Latin America (CAF).

### India Leaders in Urban Governance Programme



Officials from India explored Marina Bay, witnessing the results of water management and land reclamation that allowed for the area's rejuvenation.

Singapore and India elevated their relations to a Strategic Partnership in 2015, agreeing to collaborate in several areas including investment promotion, urban solutions, smart cities, water and waste management, and skills development. Under its framework, an MoU was signed between the Singapore Cooperation Enterprise and the Town and Country Planning Organisation, which included a capability development programme in urban planning and governance. The Centre facilitated this programme, which included four runs of skills development, peer exchanges, and networking opportunities among participants, urban leaders in Singapore, and like-minded city leaders and administrators from India. The fourth and final run was conducted in April 2017, with 99 Indian officials trained in the programme.

### Maharashtra Leaders in Urban Governance Programme



During the Maharashtra Study Visit Programme, participants heard from experts on greening, land use, water security and urban design.

The Maharashtra Study Visit Programme, held from 29 January to 2 February 2018, engaged 23 senior state level officials, heads of municipal corporations, and councils from the Indian state of Maharashtra. The programme featured lectures and site visits to showcase Singapore's urban transformation across various urban sectors, with emphases on the water and environmental management aspects of urban development. This study visit resulted from CLC's collaboration with Singapore's Ministry of Foreign Affairs in training officials from India's Town and Country Planning Organisation (TCPO) during four runs in 2016 and 2017.

### The Japan-Singapore Partnership Programme for the 21st Century (JSP21)



Participants visited Yuhua housing estate to learn how smart home technologies can conserve resources and improve care for elderly family members.

The Japan-Singapore Partnership Programme for the 21st Century (JSP21) was established through a Memorandum of Discussion (MOD) between Singapore and Japan. The Japan International Cooperation Agency (JICA), one of Japan's Official Development Assistance (ODA) implementing bodies, has been extending technical cooperation in human resource development to facilitate the autonomous, sustainable development of developing countries. The Centre, MFA and JICA organised the Urban Development through Urban Solutions and Smart Nation Vision programme in December 2017 for ASEAN countries. The course allowed participants to understand the driving forces, challenges and opportunities for sustainable urban development, urban management and Smart Nation development from both Japan and Singapore.

## Advisory

Singapore's high density and high liveability urban model has been the subject of much interest and study by city leaders and officials worldwide. CLC's advisory work is a response to the pressures of urbanisation in and the high level requests by state and city governments in Asia to create long term plans for growth and to build people-centric cities. In several instances, the request for advisory inputs from CLC had followed after its international capability development programmes held in Singapore. CLC seeks to leverage and apply Singapore's collective body of knowledge and expertise in urban planning, development and governance in practical ways to these cities focused on solving their urban challenges. It is also part of the whole-of-government effort to bring to fruition Singapore's vision to become Asia's hub for urban solutions.

### Beira Lake Intervention Area Development Plan: Colombo, Sri Lanka



Sri Lankan workshop participants hear from urban experts to gain insights for planning and development of Colombo.

The Centre has collaborated as a knowledge partner to Singapore Corporation Enterprise and Temasek Foundation International to deliver a customized capacity building programme over a series of six workshops to more than 200 officials from the Ministry of Megapolis and Western Development & Urban Development Authority in Colombo from 2015. The programme culminated in urban pioneers and experts from Singapore guiding Sri Lankan officials on formulating the Beira Lake Intervention Area Development Plan over a workshop in Singapore in September 2016 and which was launched in November 2017 by Minister (MWD) Champika. The plan aims to transform the prime area around the lake in downtown Colombo by 2035.

### Guiding Rapid Urban Development: Yangon, Myanmar



The CLC Executive Director, Mr. Khoo Teng Chee, discussing solid waste management with officials in Yangon.

In response to a request following State Counsellor Aung San Suu Kyi's state visit to Singapore in end-2016, the Ministry of Foreign Affairs (MFA) approached the Centre and Urban Redevelopment Authority to provide advice to support Yangon's rapid urban development. The Centre shared Singapore's development story over a day for more than 100 Myanmar officials and professionals in June 2017 and also held a deep dive planning workshop for a small team of officials from Yangon City Development Committee in early 2018 to demonstrate the process of preparing a draft development guide plan for a local area. Discussions were also held on the benefits and processes of establishing an Urban Planning Authority and ways to improve development processes.

### Traffic Calming Measures: Jakarta, Indonesia



The Jakarta government worked with Singapore's transportation experts to explore the feasibility of implementing an Electronic Road Pricing (ERP) system.

At the request of then Jakarta Governor Ahok in 2016, the Centre offered a programme for Jakarta officials centred on master planning, re-zoning, development and building control. Jakarta's new administration requested for the Centre's continued capacity-building support since 2017. In partnership with the Jakarta City government, Jakarta Property Institute and Singapore governmental agencies, the Centre held capacity-building workshops in traffic calming measures for 160 officials. The Centre is currently exploring possible collaboration with the Jakarta city government and Jakarta Property Institute to help the government review its Jakarta Master Plan.

### Pedestrianisation and Programming: Thimphu, Bhutan



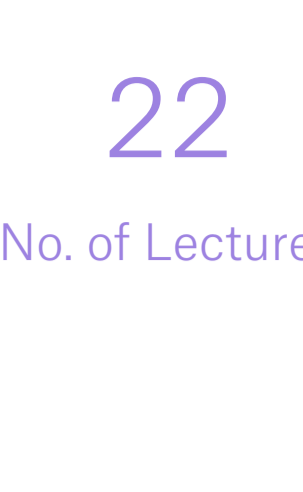
A CLC team visited Thimphu to lead a workshop discussion with Bhutanese urban planners that resulted in a series of recommendations, including reclaiming roads for pedestrians, activating side streets and programming to enhance the area.

Norzin Lam, the main thoroughfare in Thimphu, Bhutan, suffers from heavy traffic congestion. As part of efforts to pedestrianise the road and rejuvenate the city's urban core, Thimphu's Dasho Thrompon (Mayor), Kinlay Dorjee, invited the Centre to provide further advisory inputs to their plans after attending our capability development programmes in 2014 and 2016. This effort has inspired a pedestrianisation project aimed at reclaiming the busy road for the community.



# KNOWLEDGE PLATFORMS

## Lecture Series



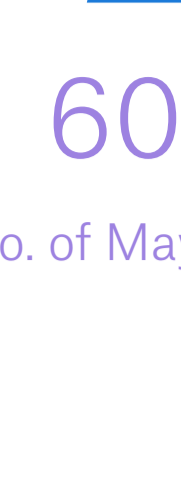
22

No. of Lectures



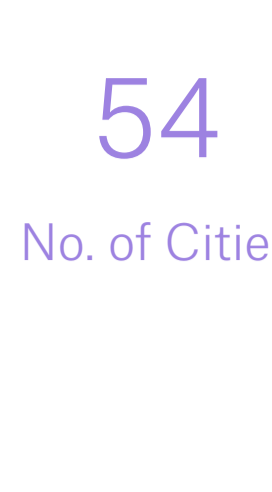
1988

No. of Attendees



60

No. of Mayors

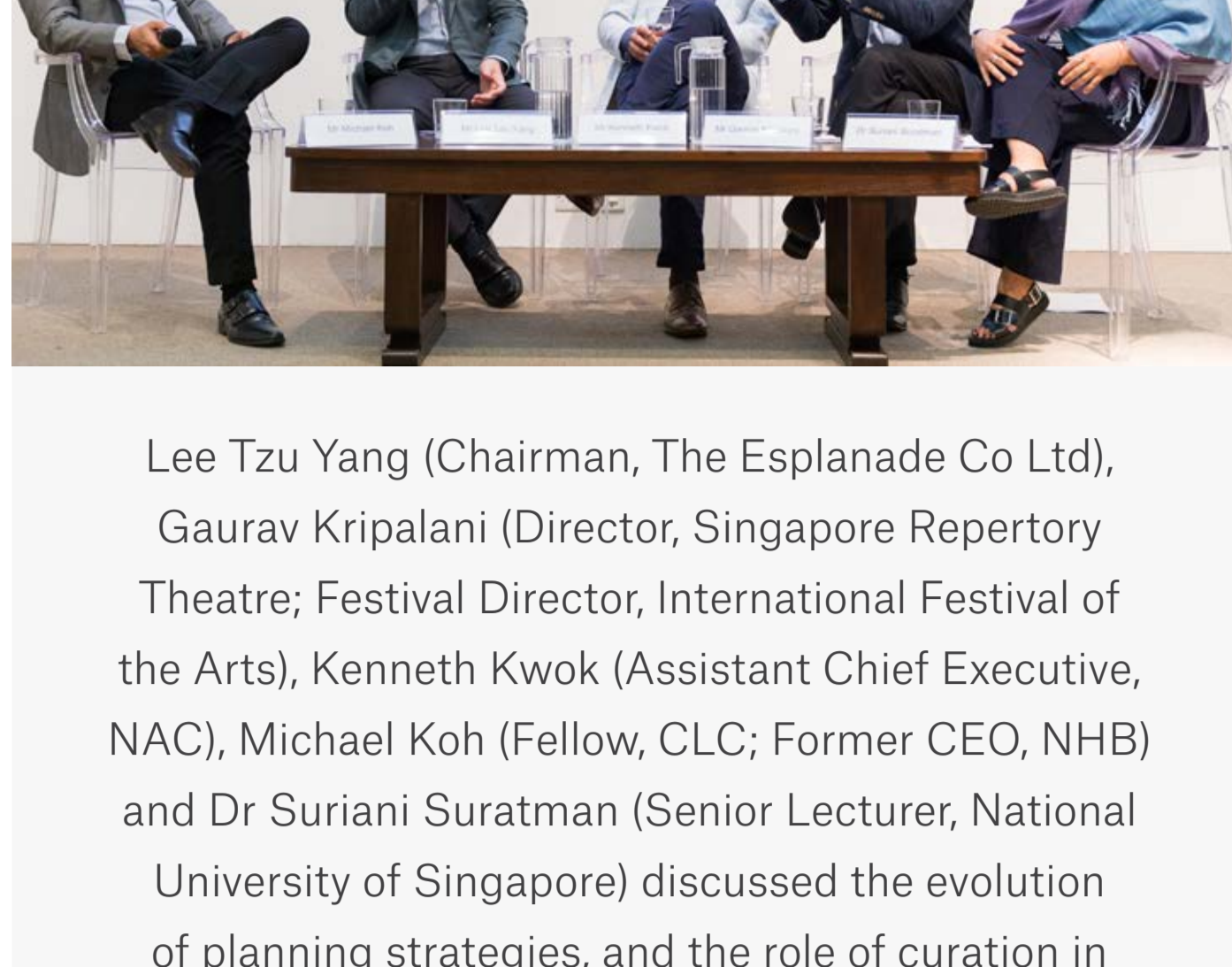


54

No. of Cities

## Lecture Series Highlights

### Spaces for Culture and the Arts in Singapore



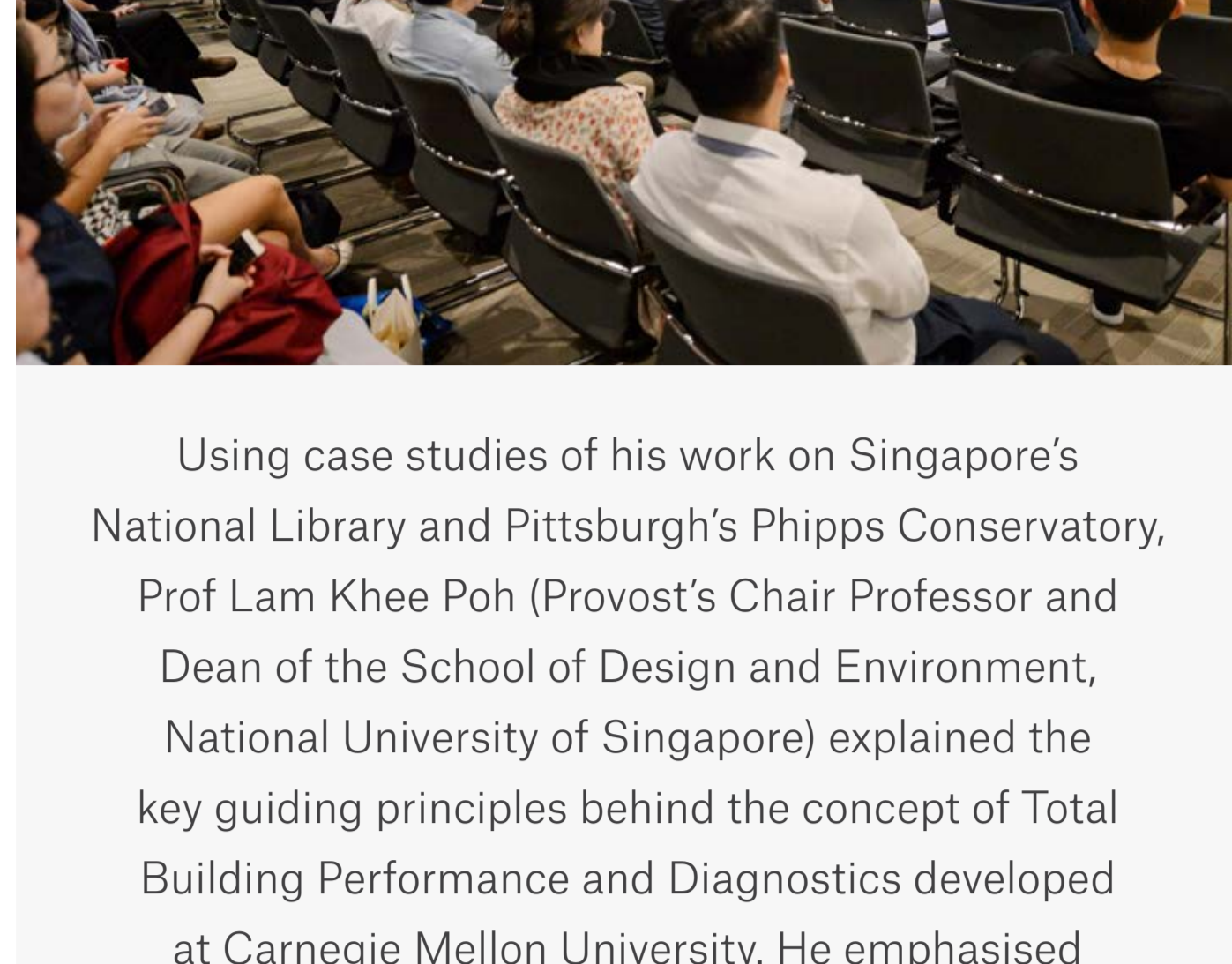
Lee Tzu Yang (Chairman, The Esplanade Co Ltd), Gaurav Kripalani (Director, Singapore Repertory Theatre; Festival Director, International Festival of the Arts), Kenneth Kwok (Assistant Chief Executive, NAC), Michael Koh (Fellow, CLC; Former CEO, NHB) and Dr Suriani Suratman (Senior Lecturer, National University of Singapore) discussed the evolution of planning strategies, and the role of curation in facilitating growth and sustainability of spaces for the arts and culture in Singapore.

Watch the [lecture video](#) or read the [lecture report](#) for more info.

Spaces are only successful if they are curated, and curated to an extent. They develop an identity, and encourage the audience and the artist to identify with [them]. From a public policy perspective, it makes sense to not just look at buildings as providing physical space, but also at place-making, investing in content and curation for the arts and culture.

**LEE TZU YANG**  
Chairman,  
The Esplanade Co Ltd

### World Cities Summit Mayors Forum



Using case studies of his work on Singapore's National Library and Pittsburgh's Phipps Conservatory, Prof Lam Khee Poh (Provost's Chair Professor and Dean of the School of Design and Environment, National University of Singapore) explained the key guiding principles behind the concept of Total Building Performance and Diagnostics developed at Carnegie Mellon University. He emphasised the importance of taking a holistic approach in design to consider not just economic concerns and technicalities, but also the human dimension.

Watch the [lecture video](#) or read the [lecture report](#) for more info.

Technologies will continue to emerge and evolve, but the fundamental principles—why we're doing what we're doing—should not change. What we should be all about is meeting the psychological, sociological and economic needs.

**PROF LAM KHEE POH**  
Provost's Chair Professor and  
Dean of the School of Design and Environment,  
National University of Singapore

### A Short History of Global Cities



With urbanisation and cross-border connectivity increasing inexorably, the world is at an inflection point. Prof Greg Clark, international mentor and advocate for cities, provided insights on the historical patterns of global cities to chart their future trajectories. Citing new technologies and geopolitical shifts, he also highlighted the importance of capitalising on Singapore's expertise in innovation and advanced urban services to sustain growth in the new urban cycle.

Watch the [lecture video](#) or read the [lecture report](#) for more info.

[T]his anti-globalisation moment is an interruption, a disruption. It will cause an important set of corrections that are needed and necessary, but I don't see globalisation and the emergence of global cities as about to stop.

**PROF GREG CLARK**

### The Complex Science of Cities



Likening the limited growth of living organisms to cities, Prof Geoffrey West shared his insights on taking a wider, holistic approach to understanding the complex behaviour and growth of cities. He highlighted the need to consider different aspects of urban life, such as socio-political and environmental issues, to reinvent city planning.

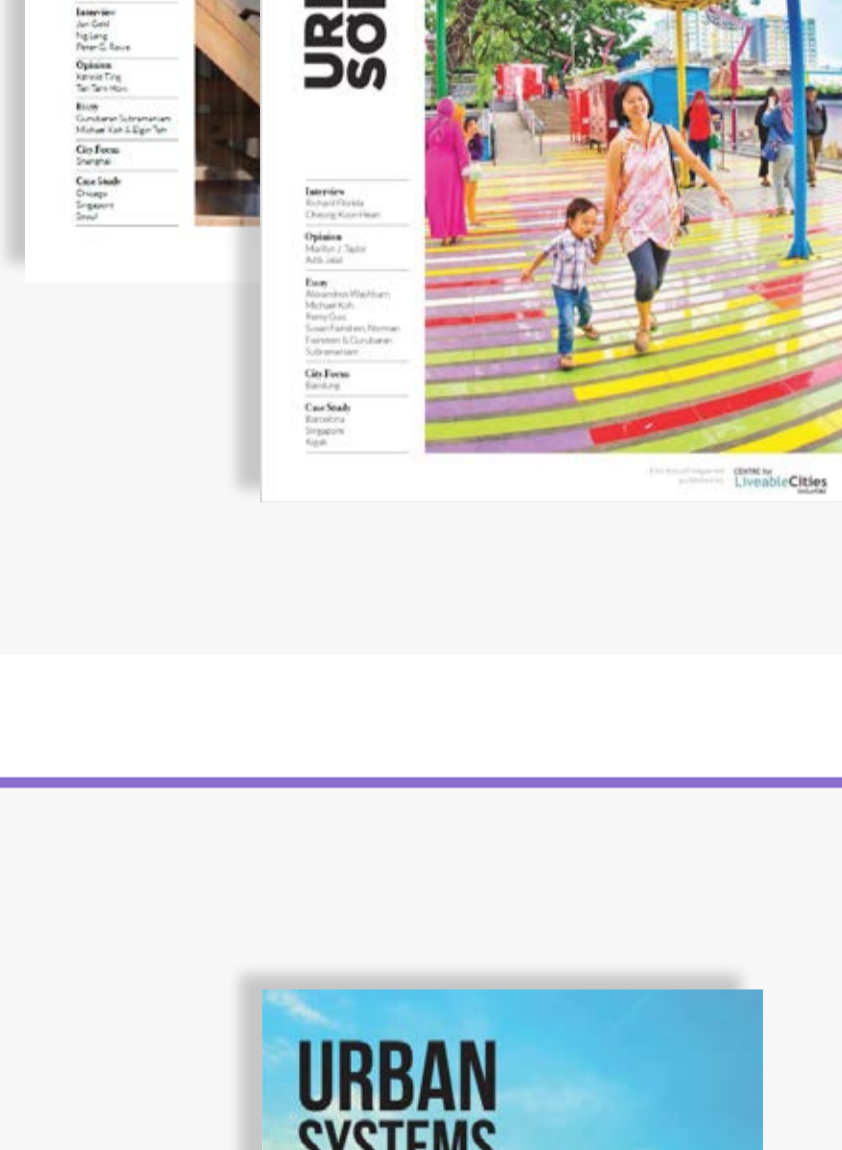
Watch the [lecture video](#) or read the [lecture report](#) for more info.

When we think of cities, one tends to think of the physicality of cities. But the city is not only much more than that—that's actually in many ways, the least interesting [and] important part of what a city is—because a city is a place of the integration of all of that physicality, that infrastructure with socioeconomic dynamics taking place between places.

**PROF GEOFFREY WEST**

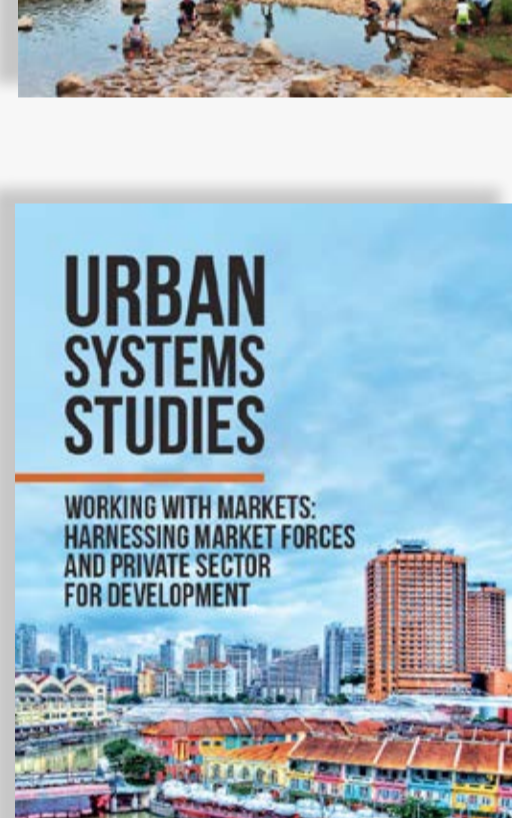
## Publications

### Urban Solutions



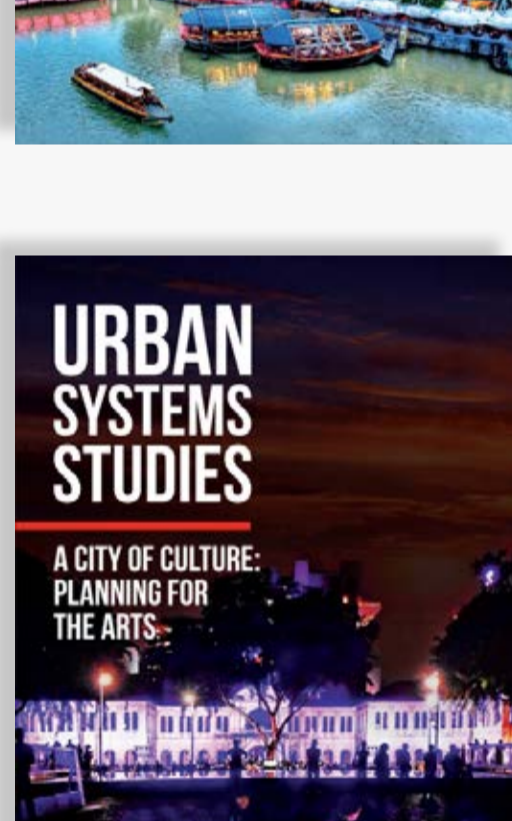
When deployed with intelligence, care and courage, public spaces can make cities more liveable, sustainable, prosperous and inclusive. Building transformative public spaces was the theme of [Urban Solutions #11](#), which included an interview with Peter Rowe and Jan Gehl as well as case studies from Chicago to Shanghai. The issue explored the value of public space in libraries, streets and historic districts. [Urban Solutions #12](#) showcased inclusive regeneration, discussing how connecting old and new presents opportunities to improve living conditions and create economic opportunities for residents. Richard Florida's sharing of how "winner-takes-all urbanism" led to socially divided cities reminded us that neglecting inclusivity has negative consequences. Marilyn J. Taylor emphasised the need for inclusivity in large urban projects.

### Urban Systems Studies



**The Active, Beautiful, Clean Waters Programme: Water as an Environmental Asset**

In the early days of Singapore's rapid development, concrete drains and canals were seen only as essential infrastructure for stormwater management. Launched in 2006, the Active, Beautiful, Clean Waters Programme transformed Singapore's utilitarian waterways and reservoirs into beautiful recreational spaces—marking a shift in the government's approach to managing vital water resources.



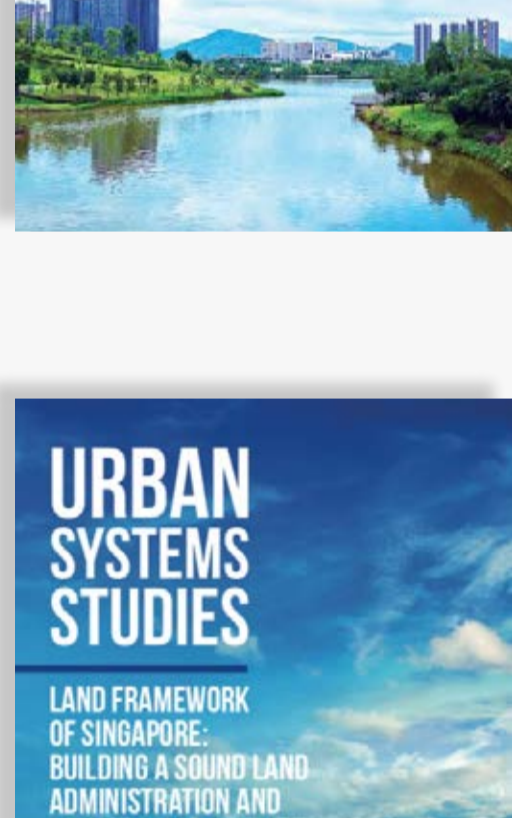
**Working with Markets: Harnessing Market Forces and Private Sector for Development**

An efficient urban infrastructure cannot be built by the government alone. This Urban Systems Study shows how successful public-private partnerships help bring down operating costs and manage state assets effectively, while allowing the public sector to focus on policymaking and regulation.



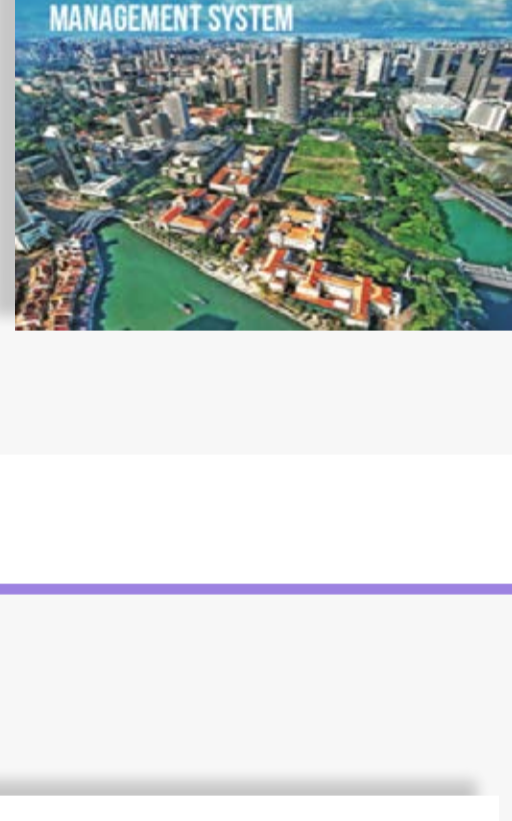
**A City of Culture: Planning for the Arts**

Culture is intricately linked to political, economic and social life. Planners and policymakers need to carefully consider the role and development of culture, and embed these considerations upfront in the urban planning process. This Urban Systems Study highlights the importance of long-term planning and collaboration across stakeholders in making Singapore a city of culture.



**Sino-Singapore Guangzhou Knowledge City: A New Paradigm in Collaboration**

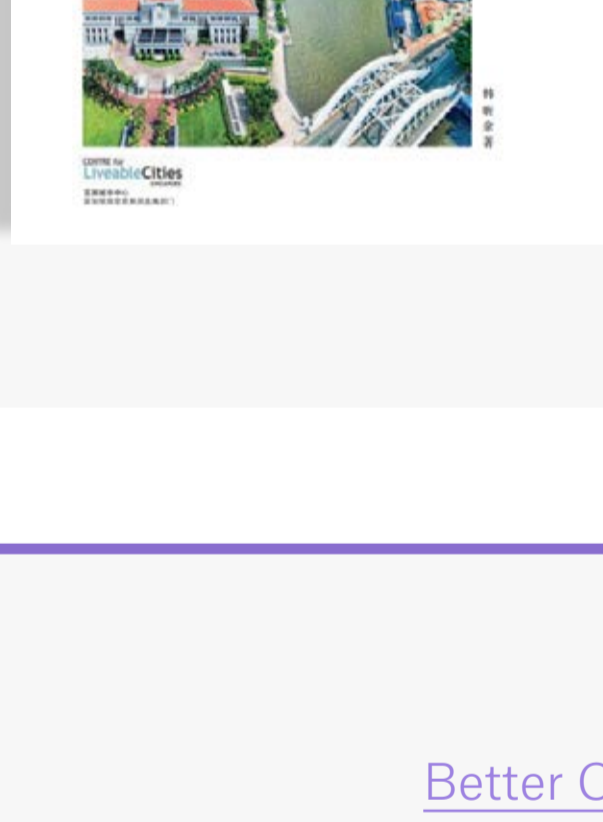
Singapore's collaboration with Chinese cities has evolved with China's changing needs. Following the successful adoption of Singapore models in Tianjin and Suzhou, the Sino-Singapore Guangzhou Knowledge City project was launched to help transform Guangdong province into a producer of higher-value products. This Urban Systems Study examines the project's objectives and challenges, and its role within China's envisioned strategic development path.



**Land Framework of Singapore: Building a Sound Administration and Management System**

Over the past five decades, reforms and consolidation of important land administration functions such as land planning, sales and management have facilitated Singapore's urban development. This Urban Systems Study traces the evolution of policies and institutions governing the effective use of scarce land in Singapore to support economic growth and the needs of its population.

### Books

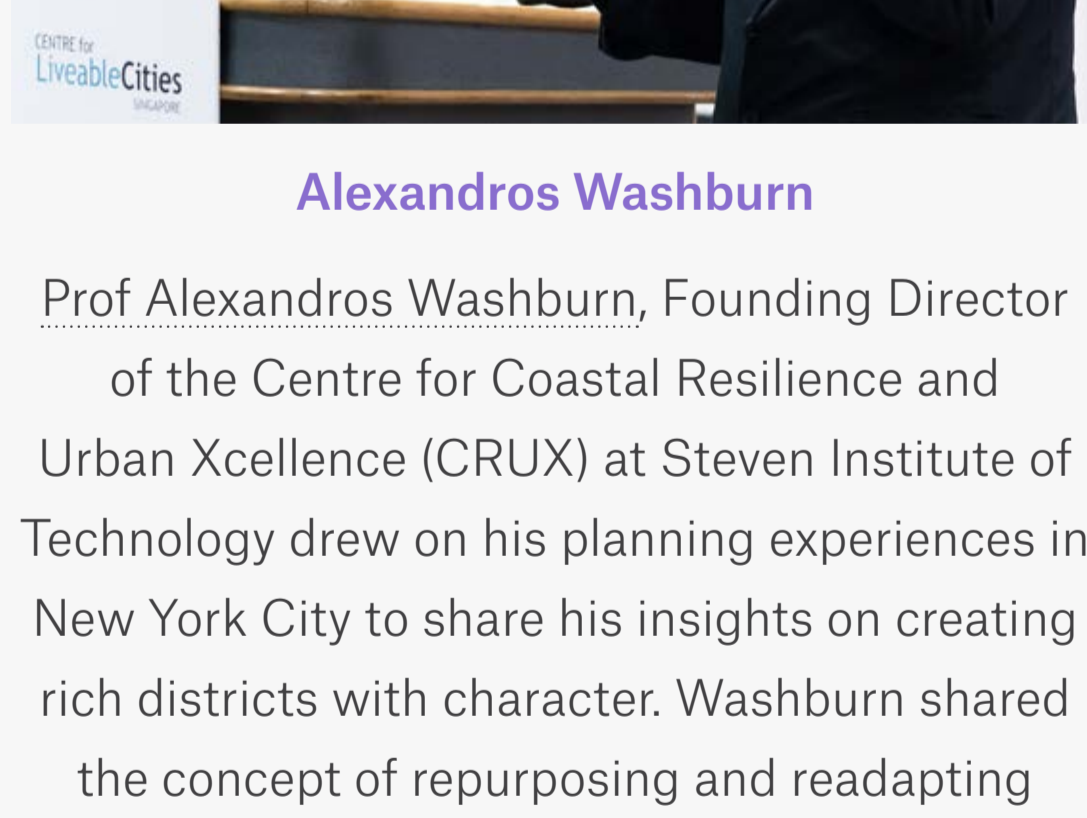


This year, the Centre released [The Little Red Dot](#), its first Chinese-language publication. Featuring interviews with 13 pioneers in sectors such as urban planning and renewal, public housing, water and environment, transportation, and economic development, the book showcases how strategic planning helped build modern Singapore.

### Better Cities

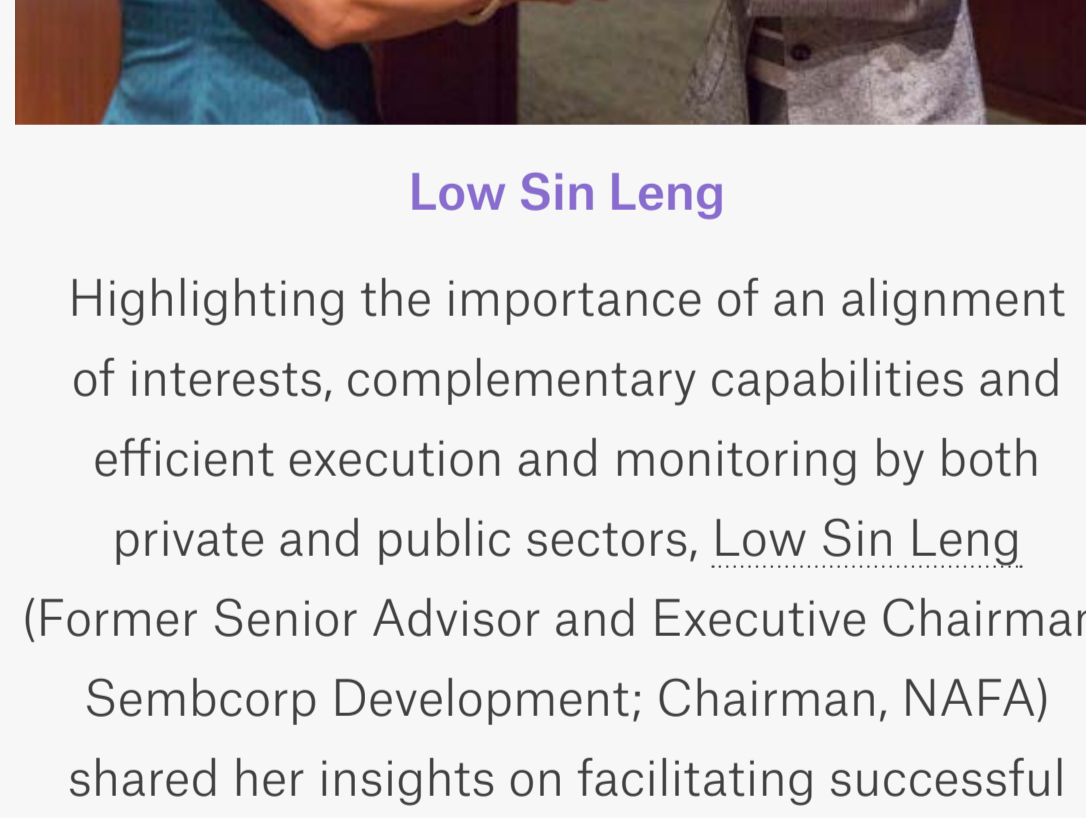
[Better Cities](#) provides a strategic channel for the Centre's friends and partners to learn about and support our work of distilling, creating and sharing knowledge on liveable and sustainable cities. Featuring interviews with experts, the monthly e-newsletter has a growing readership among government, media, academia, the private sector, and international and non-governmental organisations.

In the past year, [Better Cities](#) conducted interviews with urban leaders, professionals and thinkers such as Alexandros Washburn and Low Sin Leng.



**Alexandros Washburn**

Prof Alexandros Washburn, Founding Director of the Centre for Coastal Resilience and Urban Xcellence (CRUX) at Steven Institute of Technology drew on his planning experiences in New York City to share his insights on creating rich districts with character. Washburn shared the concept of repurposing and redefining assets, and how spaces must not be too perfect so that people are motivated to improve their own communities.

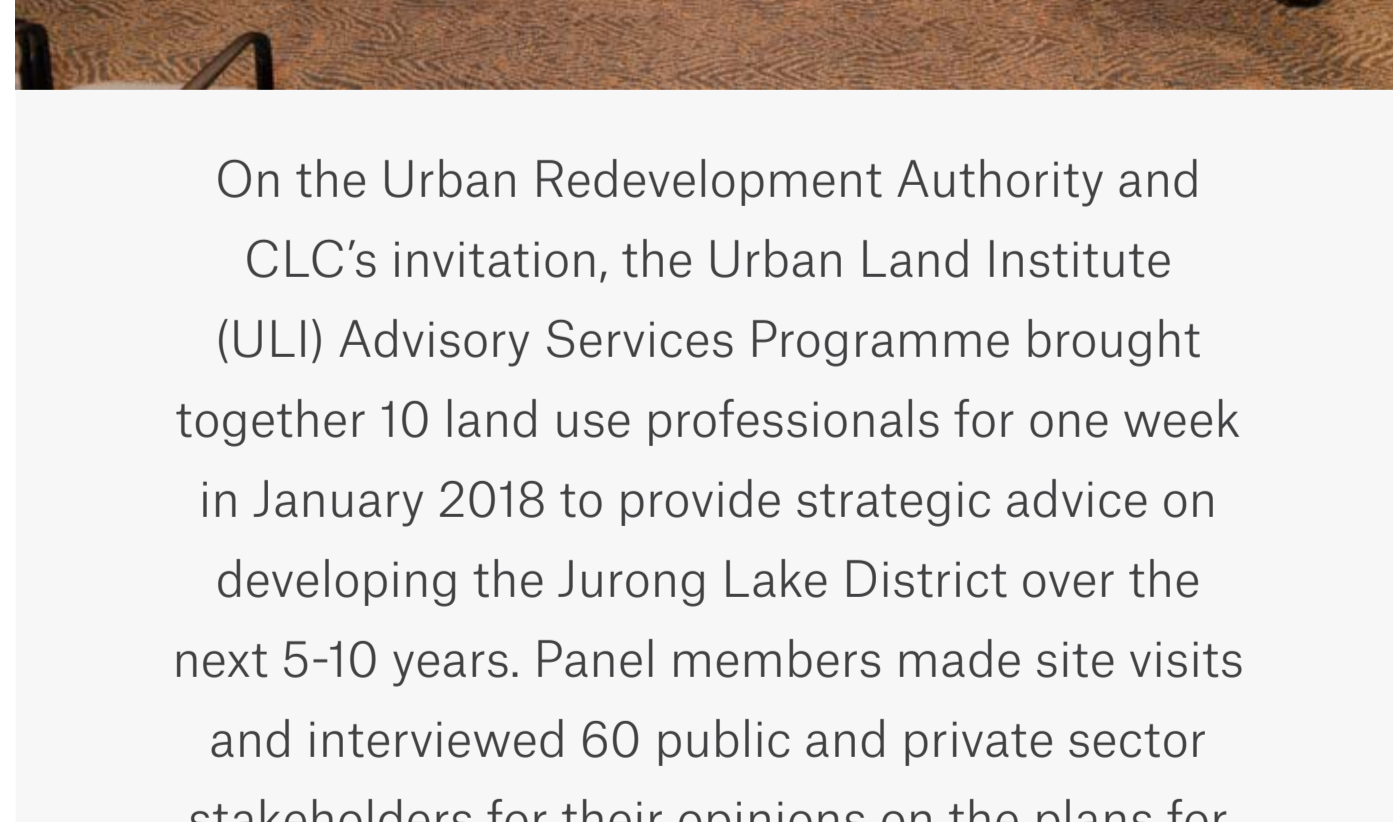


**Low Sin Leng**

Highlighting the importance of an alignment of interests, complementary capabilities and efficient execution and monitoring by both private and public sectors, Low Sin Leng (Former Senior Advisor and Executive Chairman, Sembcorp Development; Chairman, NAFA) shared her insights on facilitating successful private-public partnerships.

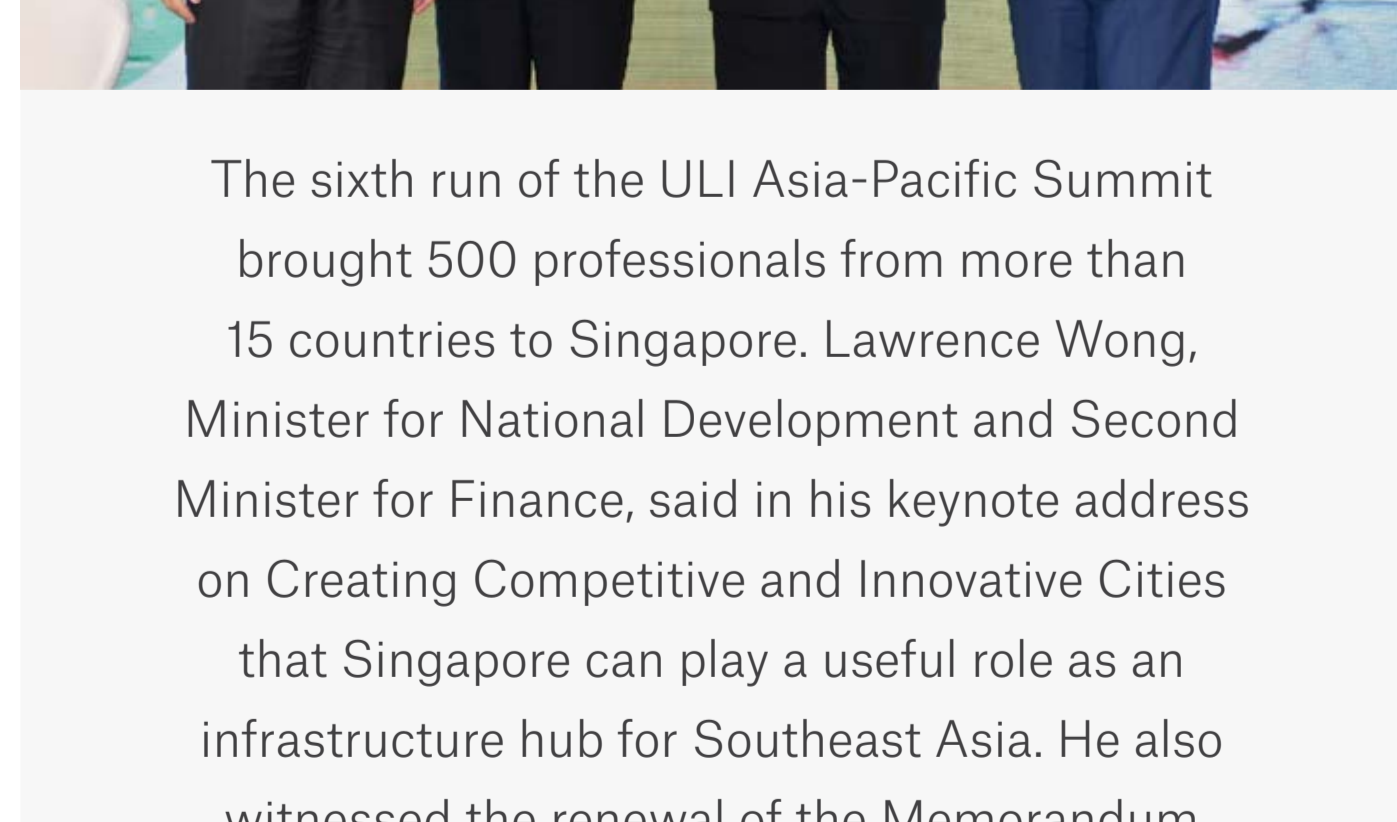
## Partnerships

### ULI Advisory Panel on Jurong Lake District



On the Urban redevelopment Authority and CLC's invitation, the Urban Land Institute (ULI) Advisory Services Programme brought together 10 land use professionals for one week in January 2018 to provide strategic advice on developing the Jurong Lake District over the next 5-10 years. Panel members made site visits and interviewed 60 public and private sector stakeholders for their opinions on the plans for the district. Deliberations culminated with a presentation to MND, URA and other relevant agencies. The panel's recommendations were taken into consideration, and continue to take shape in Jurong Lake District's upcoming plans.

### 6th Urban Land Institute Asia-Pacific Summit



The sixth run of the ULI Asia-Pacific Summit brought 500 professionals from more than 15 countries to Singapore. Lawrence Wong, Minister for National Development and Second Minister for Finance, said in his keynote address on Creating Competitive and Innovative Cities that Singapore can play a useful role as an infrastructure hub for Southeast Asia. He also witnessed the renewal of the Memorandum of Understanding (MoU) between the Centre and ULI, under which they will continue to collaborate in research, capability development and knowledge-sharing platforms between 2017 and 2020.

### World Bank Partnership



On request from the Urban and Disaster Risk Management units of the World Bank's South Asia team for a learning retreat in Singapore, the Centre organised a short learning programme in March 2018. Almost 60 World Bank specialists attended the customised two-day learning workshop providing an overview of Singapore's development experience. Experts from Centre and partner agencies such as URA, HDB, PUB, NEA and the National Climate Change Secretariat also conducted in-depth sharing on key policies and strategies related to urban planning and development, housing, flood management, waste management and climate change. Participants expressed keen interest in exploring how valuable lessons from Singapore could be applied to similar issues faced by cities in India, Sri Lanka, Bangladesh and Pakistan.

### China Partnerships



In May 2017, the Centre and Suzhou Industrial Park Administrative Committee (SIPAC) organised a SIP joint symposium and launched a joint development report to share the key insights from SIP's 23 years of development. Singapore and Chinese SIP pioneers also received awards of appreciation by then-SIP Party Secretary Xu Huimin (image above). In terms of capability development, the Centre received 50 Chinese officials including Party Secretaries, Mayors and Deputy Mayors from various Chinese cities and government departments. In March 2018, the Centre was invited for the third time to participate in the China Development Forum (CDF) at the Diaoyutai Guest State House since the MOU-signing with the Development Research Center of the State Council of China (DRC) in 2015. The CDF saw the strong participation of Chinese national and ministerial leaders, renowned thought leaders including Nobel Laureates, leaders of international organisations, and global corporate executives.



## CLC Calendar of Events

2017

APR

10 – 28 Apr

11th Executive Development and Growth Exchange Programme (EDGE)

24 Apr

Lecture: Urban Innovations in the City II  
Speaker: Mr David Tan

24 – 28 Apr

3rd Town & Country Planning Office (India Central Government) Leaders in Urban Governance Programme

26 Apr

Lecture: Environment Sustainability—The Singapore Journey  
Speakers: Mr Loh Ah Tuan, Mr Liak Teng Lit, Ms Isabella Loh

MAY

4 – 5 May

Jakarta Deep Dive Workshop on Development Control and Building Control Part 2

17 – 19 May

8th World Cities Summit Mayors Forum, Suzhou, China

17 May

Book Launch: The Little Red Dot with an Extensive, Strategic Vision

18 May

4th Young Leaders Symposium, Suzhou, China

22 – 26 May

25th and 26th City Executive Leaders Programme (City EXCEL)

30 May

Lecture: Circular Cities, Improving Liveability & Economic Climate in Amsterdam: An Example to the World  
Panellists: Kees Slingerland, Bob Geldermans, Dr Lee Hui Mien

JUN

2 Jun

Lecture: A New Model for Municipal Services Delivery  
Panellists: Mark Harris, Amit Pathare

6 Jun

Book Launch: Urban Mobility: 10 Cities Leading the Way in Asia-Pacific (e-publication)

8 – 9 Jun

Yangon City Development Committee Workshop

7 Jun

MOU renewal with Urban Land Institute

12 – 23 Jun

MFA Senior Chinese Officials Study Visit—Yunnan

13 Jun

Lecture: Building Social and Environmental Resilience in Cities Through Planning

Panellists: Prof Barbara Norman, Professor Peter Edwards, Prof Amita Bhides

28 Jun

Lecture: Making Singapore More Pedestrian Friendly  
Panellists: Mr Bruno Wildermuth, Mr Menon Gopinath

5 – 9 Jun

Inaugural Singapore UN Habitat International Leaders in Urban Governance (SG UN-Habitat iLUGP)

JUL

3 – 21 Jul

12th Executive Development and Growth Exchange Programme (EDGE)

10 – 21 Jul

MFA 4th Senior Chinese Officials Study Visit

17 – 21 Jul

Andhra Pradesh Deep Dive on Planning, Transport, Urban Design and Development Control

18 Jul

Lecture: A Short History of Global Cities  
Speaker: Prof Greg Clark

18 Jul

Book Launch: Urban Systems Studies—The Active, Beautiful, Clean Waters Programme: Water as an Environmental Asset

21 Jul

Lecture: Singapore Sharing City: Unlocking New Opportunities and Building Stronger Communities

Speaker: Mr Harmen van Sprang

26 Jul

Lecture: Cities Taking the Lead  
Speaker: Prof Marilyn Jordan Taylor

28 Jul

Lecture: Changing the Way We Build  
Speaker: Dr John Keung

AUG

14 – 18 Aug

4th Town & Country Planning Office (India Central Government) Leaders in Urban Governance Programme

15 Aug

Lecture: A Tale of Two Cities—Towards a Common Destiny of Sustainability and Resilience Through People-Centric Green Architecture

Speaker: Prof Lam Khee Poh

17 Aug

Lecture: Constructing Singapore Public Space  
Speakers: Dr Limin Hee, Prof Peter Rowe, Mr Michael Koh

21 – 25 Aug

27th and 28th City Executive Leaders Program (City EXCEL)

28 Aug

Leaders in Education Programme (LEP)

SEP

7 Sep

Lecture: Landscapes of the Future  
Speaker: Daan Roosegaarde

12 Sep

Lecture: Reimagining Orchard Road  
Speaker: Mr Phil Kim

18 – 22 Sep

29th and 30th City Executive Leaders Programme (City EXCEL)

19 Sep

Lecture: Financing Sustainable Cities  
Speaker: Mr John Macomber;

Panellists: Prof Deng Yongheng, Mr Goh Toh Sim

21 Sep

Lecture: Creating Conversations about Planning  
Speaker: Mr Paul Farmer

OCT

2 – 27 Oct

8th Leaders in Urban Governance Programme

3 – 7 Oct

CLC-Thimphu Joint Workshop on Pedestrianisation of Norzin Lam

10 – 12 Oct

Andhra Pradesh Deep Dive on Housing and Building Control

19 Oct

Book Launch: Urban Systems Studies—Working with Markets: Harnessing Market Forces and Private Sector for Development

19 Oct

Lecture: Working with Markets—Harnessing Market Forces and Private Sector for Development Launch

Panellists: Mr Choy Chan Pong, Ms Low Sin Leng, Er. Lau Joo Ming, Prof. Phang Sock Yong

24 – 27 Oct

Andhra Pradesh Deep Dive on Power

31 Oct

Book Launch: Urban Systems Studies—A City for Culture: Planning for the Arts

31 Oct

Lecture: Spaces for Culture and the Arts in Singapore

Panellists: Mr Lee Tzu Yang, Mr Michael Koh, Mr Gaurav Kripalani, Mr Kenneth Kwok, Mr Lee Tzu Yang

NOV

6 – 10 Nov

National Development Reform Commission—Temasek Foundation International Leaders in Urban Governance Programme (NDRC-TFILUGP)

10 Nov

CLD-NDRC Seminar: Moving Forward—Urban and Social Development in China

20 – 24 Nov

31th and 32th City Executive Leaders Programme (City EXCEL)

21 Nov

Book Launch: Planning for Communities: Lessons from Seoul and Singapore

21 Nov

Lecture: Planning for Communities: Lessons from Seoul and Singapore Launch

Speaker: Dr Miree Byun;  
Panellists: Dr Hunchan Ahn, Ms Eileen Neo, Mr Tan See Nin, Ms Foo Soon Leng

25 – 29 Nov

CLC Latin Asia Business Exchange (LABX)

27 – 28 Nov

Sri Lanka Leaders in Urban Governance Programme Closing Workshop in Colombo/Launch of Beira Lake Intervention Area Development Plan

28 Nov

Jakarta-TFILUGP Follow-up Workshop on Congestion Pricing

DEC

4 – 8 Dec

Temasek Foundation International Leaders in Urban Governance Programme (TFILUGP)

4 – 8 Dec

Japan-Singapore Partnership Programme for 21st Century (JSP21) Urban Development Through Urban Solutions and Smart Nation Vision Programme

2018

JAN

15 – 19 Jan

Yangon City Development Committee Planning Division Workshop

22 – 26 Jan

33rd and 34th City Executive Leaders Program (City EXCEL)

22 – 23 Jan

Andhra Pradesh Deep Dive on Solid Waste Management

24 Jan

Gaps and Opportunities for a Resilient Singapore. CLC 100 RC Workshop

29 Jan – 2 Feb

Maharashtra Study Visit Programme

31 Jan

Lecture: The Future Beckons: Food, Science & Technology

Speaker: Ms Tan Poh Hong;  
Panellists: Dr Azlinda Anwar, Mr Jack Moy

26 Feb

Book Launch: Urban Systems Studies—Sino-Singapore Guangzhou Knowledge City: A New Paradigm in Collaboration

26 Feb

Lecture: Enterprise-Led, Government-Supported, Market-Driven Development Model: Guangzhou Knowledge City

Speakers: Ms Nina Yang, Mr Ng Kok Siong, Ms April Oh, Dr Victor Li Lietao, Mr Michael Leong

12 Mar

MoU renewal with Santa Fe Institute

12 Mar

Lecture: Scale: The Complex Science of Cities  
Speaker: Prof Geoffrey West

19 – 23 Mar

35th and 36th City Executive Leaders Program (City EXCEL)

### CENTRE FOR LIVEABLE CITIES

Set up in 2008 by the Ministry of National Development and the Ministry of the Environment and Water Resources, the Centre for Liveable Cities' 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.

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#### Cover Image

Visitors walking through the Southern Ridges, a 10-meter park connector with lush greenery and pedestrian bridges.

Image credit: "Forest Walk 2008" provided by the Urban Redevelopment Authority

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