

January 2025

# SIP Newsletter

8th SIP Planning Awards 2023 - Series

1 SIP HK Study Trip

SIP Mentor Programme



Photo Credit: SIP

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# Welcome Note from SIP President

Dear SIP members and supporters,

Welcome to the second edition of our Newsletter.

This edition features the winners from the 8th SIP Planning Awards 2023 Category 1: Excellence in Planning > 5,000 ha Gold Award Winner; Category 2: Excellence in Planning 500 ha & up to 5,000 ha Gold Award Winner; and Category 9: Excellence in Planning Driven by Innovative Urban Solutions and Technology Silver Award Winner. Their methodical, systematic and innovative approach to urban planning offer valuable learning opportunities for all practitioners involved in urban planning, and are great case studies and references for urban planning students.

To further our learning, SIP is jointly organising a study trip with Hong Kong Institute of Planners (HKIP) and Hong Kong Institute of Surveyors (HKIS). The trip will focus on two key subject matters: New Growth Areas and Urban Revitalization. There is also opportunity for Young Planners to win a trip to HK! For more information, refer to the information in the newsletter.

Wishing all a healthy and fulfilled 2025.

Djoko Prihanto

President

Singapore Institute of Planners 2024-2026

Category 1: Excellence in Planning > 5,000 ha  
Gold Award Winner

**Concept Plan for Pune Metropolitan Region (PMR), India**

By Surbana Jurong Consultants Pte. Ltd

The Pune Metropolitan Region (PMR) spread over 6,900 sqm is located within 100 km of Mumbai, India's financial capital. PMR is rapidly urbanising and has the potential to become the next major growth hub after Mumbai by leveraging on its proximity to the Mumbai Metropolitan Region (MMR), its established industrial ecosystem, educational institutions, favorable climate, excellent natural setting, economic opportunities, skilled workforce, and better quality of life.

In 2019, a comprehensive and implementable Concept Plan was prepared by Surbana Jurong (SJ) to leverage PMR's socio-economic potential and address its challenges, including:

- Managing urban sprawl,
- Revitalising satellite towns,
- Densifying peri-urban areas,
- Protecting eco-sensitive areas, and
- Strengthening mass transport connectivity.

To ensure transparency and effective planning, a data-driven, computational methodology was adopted by SJ. Additionally, Pune Metropolitan Region Development Authority (PMRDA) received training in digital-based planning to facilitate implementation. As a result, Development Plans for all growth centres were prepared by PMRDA and approved by the State Government in 2021.

**Key Points**

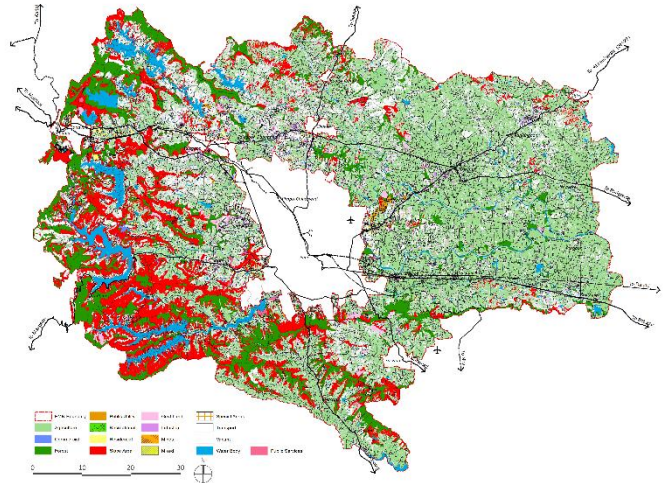
**1. Key Challenges with Previous Regional Plans:**

Regional Plan 1991-2011 had been guiding the PMR growth since 1997. Its intention was to achieve decongestion of Pune Metropolis and create employment opportunities closer to the rural areas to curb rural-urban migration and congestion of the Metropolis. Year 2018 assessment reveals that this conventional top-down planning model of growth needed to be improved. While the Pune Metropolitan Region Development Authority (PMRDA) has jurisdiction over PMR, there are other authorities with their own expansion plans.

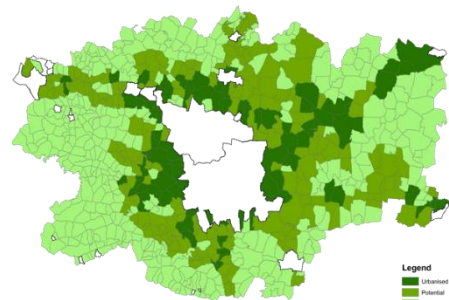
**2. Data-Driven Planning Approach:** PMR's unique potentials, key challenges, e-governance initiative and need for transparent planning solutions with supporting data triggered a shift towards "Computational Planning" which employed mathematical operations (coding) and relevant digital planning tools. Three key steps exemplified this computational planning approach namely,

- Urbanisation Strategy driven by data
- Economic Strategy sharpened by data
- Digital Planning by synthesising data

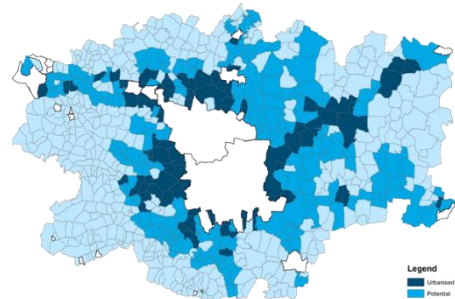
Existing Land Use Map



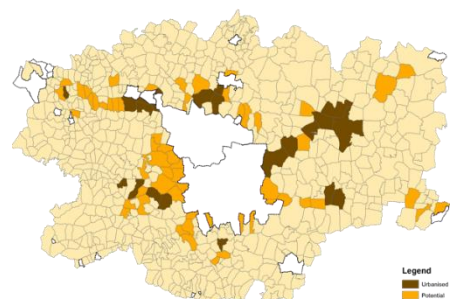
Digital Tools for different perspectives



Citizen's Perspective



Government's Perspective



Private Developer's Perspective

**3. Inclusive & Coordinated Development Effort:** As a best planning practice, this plan considered various expansion plans proposed by different local authorities and key infrastructure projects such as the construction of a new international airport, ring roads, railway upgrades including the integration of Hyperloop connectivity. These initiatives will boost economic growth and attract international investments, establishing PMR as the next growth engine after Mumbai.

**4. Prioritisation & Implementation:** Further to the preparation of overall regional development framework, suitable high scoring administrative boundaries/villages were identified as urban growth centres based on a GIS-driven systematic analysis. Each village was assigned a score based on various socio-economic parameters, allowing for the categorisation of the region into Peri-Urban and Rural areas according to their distinct development potentials. As a result, Development Plans for all the growth centres were prepared by PMRDA subsequently and approved by the State Government in the year 2021.

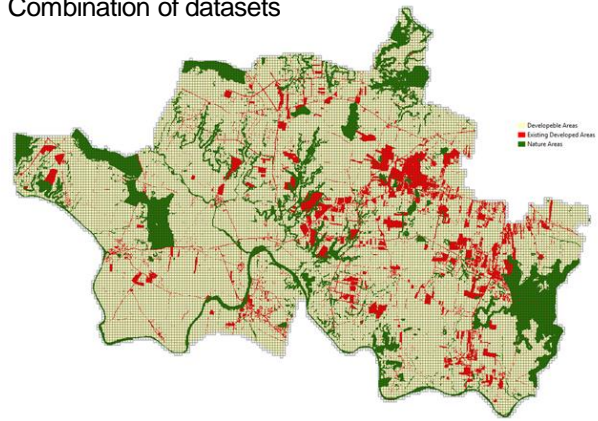
**Takeaways**

The proposed data-driven PMR Concept Plan leveraged on its unique assets and economic opportunities to guide a long-term socio-economic strategies. With the support of relevant digital tools and analysis, its historical and potential challenges were meticulously addressed. It promoted work-live hubs in the prioritised peri-urban areas which would help to mitigate various urban issues and promote the vision envisaged by previous regional plans.

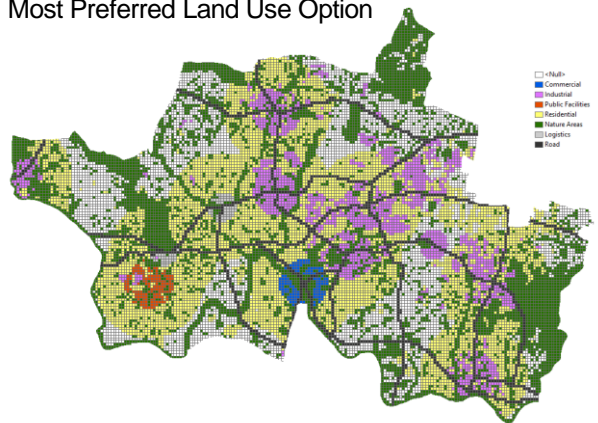
Regular systematic reviews for adaptability was recommended. The plan also focused on sustainable and equitable development, seamless integration of various authority plans, and timely yet high-quality implementation. By 2041, PMR has been envisaged to become “India’s Most Livable Habitat and the Premium International Investment Destination that is Ultra Modern and Futuristic”.

**CELLULAR AUTOMATION MODEL OUTPUT**

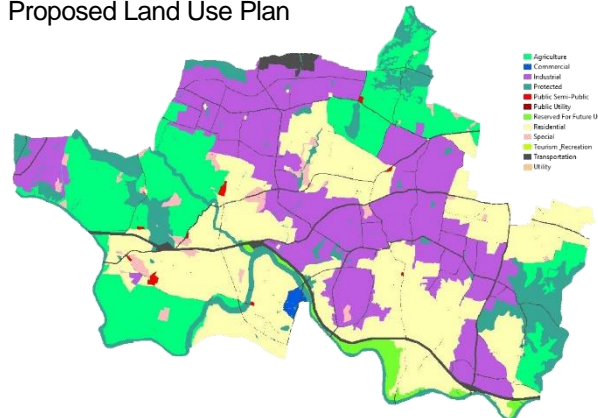
Combination of datasets



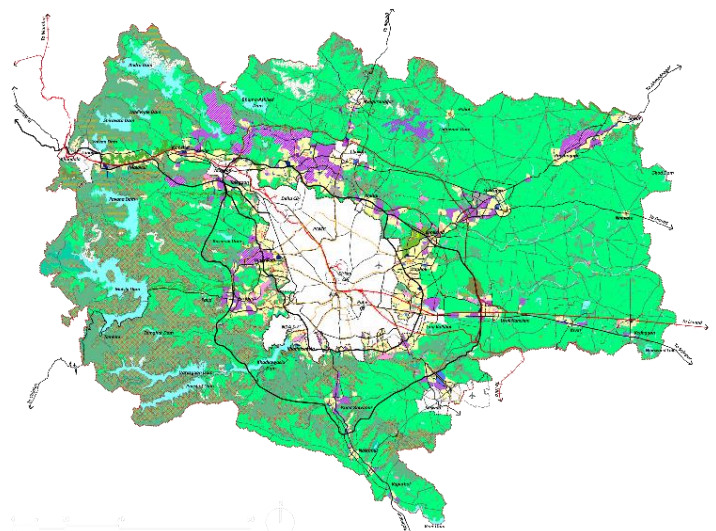
Most Preferred Land Use Option



Proposed Land Use Plan



Consolidated Regional Plan



**Judges' Citation**

This is a methodical and systematic approach to planning using computational and digital tools to assess urban development potential, and to analyse different layers to come out with the proposed land use for the metropolitan area. The proposal also took on a more quantitative approach to link economic development with transport to provide a rational basis for the proposed plan.

There are tremendous opportunities to learn from this planning effort that requires detailed planning and inputs from different stakeholders and assessment of the environment and feasibility. Good combination of long-discussed ideas such as growth centres with innovations of the last 25 to 50 years such as GIS. The tiered approach provides a common-sense and credible alternative to the top-down approach that has been traditional in India.

Category 2: Excellence in Planning 500 ha & up to 5,000 ha  
Gold Award Winner

**JID: Revolutionizing Industrial Planning and Integrating  
Communities in a Sustainable, Future-Ready District**

By JTC Corporation



**Summary**

Jurong Innovation District (JID) is an ambitious 620ha next-generation industrial district in Singapore, planned by JTC Corporation. Comprising five unique precincts - CleanTech Park, Bahar, Bulim, Tengah and Nanyang Technological University (NTU), JID is envisioned to be a vibrant, inclusive, sustainable and future-ready advanced manufacturing hub that powers innovation and drives economic growth as part of the Western Gateway of Singapore.

The district employs a unique Enterprise District (ED) policy that allows co-location of the entire manufacturing value chain. JID is designed to be a car-lite estate and integrates innovative traffic demand management measures, featuring an 11km Sky Corridor for active mobility and integrated underground spaces with logistic network, hub parking and shared utility spaces. The district is also planned for sustainable development with integrated green spaces that serve both environmental, social and recreational needs of the communities.

The development is phased over 30 years and involves collaborative efforts with various government agencies and private sector players to ensure it meets evolving economic, social, and environmental needs.

**Key Points**

•**Strategic Regional Positioning:** Envisioned as the regional growth engine of the Western Region to support the advanced manufacturing industry in Singapore, with synergy to Jurong Lake District, Jurong Industrial Estate and industry-academia collaboration with NTU.

•**Innovative Mixed-Use District:** The Enterprise District (ED) Policy allows flexible land use planning where quantum can be flexibly distributed and transferred across parcels to allow constant rejuvenation and better adaptation to the dynamic economic trends.

•**Car-lite District with Seamless Connectivity:** Features the 11km Sky Corridor as a continuous network for pedestrians and active mobility users to complement the new Jurong Region Line MRT.

•**Innovative Car-lite Policy:** The first industrial estate to adopt the Monitor & Develop approach with LTA, allowing strategic development staging while monitoring the traffic performance of the network.

•**Integrated Underground and Logistic Network:** The first district with integrated underground logistic network for future automated goods vehicle and hub parking with centralised distribution centre to catalyse industry transformation.

•**Environmentally Sustainable Industrial Estate:** Emphasizes extensive integrated and multi-functional green spaces with nature-based solutions, aiming for more than 30% overall green cover.



## Takeaways

**1. Flexibility in Planning:** JID's innovative ED policy allows flexible land use, catering to the dynamic needs of industrialists and fostering a cohesive manufacturing ecosystem.

**2. Sustainable Development:** JID prioritizes sustainability through integrated green spaces and car-lite infrastructure, reducing environmental impact.

**3. Collaborative Effort:** The successful development of JID relies on a Whole-of-Government approach and partnerships with various stakeholders.

**4. Future-Ready Infrastructure:** JID's design includes advanced and innovative infrastructure for both pedestrians and goods traffic to enhance connectivity and reduce congestion.

**5. Phased and Adaptive Development:** The district's long-term development plan includes regular reviews to adapt to industry and community needs.

**6. Community and Economic Growth:** By integrating amenities and promoting collaboration between industrial, research, and academic sectors, JID aims to create a vibrant community and drive economic growth.



## Judges' Citation

The JID is a highly innovative and comprehensive plan of how new generation work districts can combine production, R&D and the showcasing of products in an attractive and liveable environment. The car-lite, sustainable and smart industrial park will feature a sky connector, autonomous smart logistic system, collaborative and dynamic land use planning. There is also good integration with the tertiary education campus, commercial hub and housing developments.

The innovations aim to provide flexibility as market demands change over time within the overall values that the various requirements seek to respect for the entire area. The mix of temporal and spatial limitations, trade-offs and iterative feedback loops all serve to ensure a high probability of success for the broader goals that mix the economy, liveability and sustainability. When successfully implemented it will represent a new generation of industrial park planning and development in Singapore.

# 8th SIP Planning Award 2023 Winners Series 1

## Category 9: Excellence in Planning Driven by Innovative Urban Solutions and Technology Silver Award Winner

### Yishun and Kallang-Kolam Ayer Industrial Estate Master Plan

By Arup Singapore Pte. Ltd



Yishun Innovation District, a small but strategically located precinct at Singapore's Northern Gateway, is being reimaged into a mixed-use, vibrant community.

We participated in JTC Corporation's Reimagining Singapore's Industrial Landscape Request for Proposal (RFP), which sought blue-sky ideas to rejuvenate this mature industrial estate. Through this RFP, we collaborated with JTC to develop a concept masterplan and urban design proposals transforming the 72Ha brownfield site into 'The Intersection', where innovation, industry, academia, community, and nature are integrated. The masterplan brings together industry, schools and religious precincts, food courts, green spaces and sustainable transport.

We designed the new precinct to support job growth, build strategic skills, and attract skilled professionals. To create a holistic and integrated masterplan, we brought together a diverse, multidisciplinary team of urban designers, architects, digital specialists and civil engineers. Four goals guided our design; industrial expansion, integrated living, greening and sustainable transport; to cater for economic, social and environmental value creation.

Our work is helping strengthen Yishun as a high-tech industrial precinct, where people can work, live, access high quality open spaces, and connect with their community. The new precinct is envisaged to provide Singapore with over 1.4 million square metres of industrial space and 1,000 new homes. Over 400,000 square metres of urban greening will enhance the area's appeal while creating a comfortable microclimate

#### Master Plan

Our integrated masterplanning approach carefully weighed the numerous spatial and infrastructure factors, including transport and logistics, green and blue spaces, land-use, utilities, and community and social considerations. The concept masterplan addresses the significant challenges of diverse tenancies, height

restrictions and adaptive building reuse, and seeks to create synergies among these elements. Designed as a future-ready development, 'The Intersection' prioritises sustainability, with green spaces that promote biodiversity and roof tops that contribute to nature regeneration.

We undertook rigorous research to understand the key social, ecological, and economic trends, including an aging population, climate change and sea-level rise and rapid technological changes. These trends presented opportunities to embed resilience at every level of design. We then identified Yishun's strategic positioning, in line with Singapore's long-term economic strategy, the positioning of other industrial sites and Yishun's unique legacy as an industrial site.

Once established, we defined which industries Yishun should focus on and how these industries could provide the right jobs to attract the right people to the area. Through global benchmarking, we assessed the pre-requisites for success, including overlapping land uses, connectivity and high-quality public spaces.



The masterplan positions Yishun as a high-tech industrial precinct.

## Transport & Mobility

Surrounded by flourishing residential neighbourhoods and nature reserves to the east, we recognised that to make The Intersection successful, it must be open and accessible to everyone. Our concept masterplan enables the estate to seamlessly connect with the surrounding developments, but to also create new, shorter pedestrian links to Mass Rapid Transit stations. While the site is designed to work effortlessly for an Industrial 4.0 logistics network, the people mobility concepts adhere to car-lite strategies, with people-first street designs.

## Architecture

Our concept masterplan focuses on five desired outcomes: a mixed-use vibrant community, protect and nurture the natural environment, connect innovation and manufacturing, and embed circular economy principles. Examples of this include urban greening, blue infrastructure, shared spaces for community academia and industry, repurposing buildings, modular construction for all components, including energy and transport and logistics infrastructure.

## Key Points

- 1. Strategic Rejuvenation:** Revitalizing Yishun Industrial Park with Industry 4.0 principles to support future jobs and skills.
- 2. Masterplan Vision:** 'The Intersection' focuses on innovation, industry, community, and nature integration.
- 3. Key Industries:** Emphasis on early advanced manufacturing, IoT, additive manufacturing, modular construction, agri-tech, and renewable energy.
- 4. Spatial Strategy:** Four modes of intervention - Spines, Intersections, Yards, and Lanes.
- 5. Innovative Design:** Modular 'Pixel' units, new industrial typologies, and green building strategies.
- 6. Integrated Planning:** Multidisciplinary approach addressing transport, green spaces, utilities, and social considerations.
- 7. Sustainability Goals:** Promoting biodiversity, green spaces, and water-sensitive urban design.
- 8. Core Values:** Mixed-use community, City in Nature goals, innovation and manufacturing connectivity, circular design, and people-first logistics.
- 9. Phased Implementation:** Social activation and three development phases focusing on community engagement and infrastructure.

## Takeaways

- **Rejuvenation with Industry 4.0:** The transformation aligns Yishun with advanced industrial parks, fostering innovation

and strategic skills.

- **Mixed-use and Sustainable Design:** Integration of industrial, community, and natural elements with a focus on sustainability and adaptability.
- **Community and Industry Collaboration:** Encourages creative intersections among industry, academia, and the community.
- **Phased Development:** Ensures community acceptance and gradual implementation of innovative concepts and infrastructure.

For more information on this project, you can visit:

<https://www.arup.com/projects/yishun-innovation-district/>



## Judges' Citation

This project demonstrates a radical approach to urban planning, embracing innovative public realm design, urban mobility, landscape design and construction technology solutions in the planning outcome.

The proposed 'Pixel' approach is agile, robust and scalable with the aim to revitalize the old Yishun industrial estate. As Yishun is not a new town, the social activation phase to get buy-in is critical and will help shape the possible evolution of the Pixels.

Overall, the project offers a coherent solution to transform an old industrial estate into a dynamic site, providing an adaptable habitat and creating values for the urban community.

## SIP Events Updates



Singapore Institute of Planners (SIP) organized a Sharing Session for the winners of the 8th SIP Planning Awards 2023 for the following projects:

1. Excellence in Planning (>500Ha & up to 5000Ha): Jurong Innovation District Master Plan by JTC
2. Excellence in Planning (>5000Ha): Pune Metropolitan Region Concept Plan by Surbana Jurong (SJ)
3. Excellence in Planning Driven by Innovative Urban Solutions and Technology: Yishun Industrial Estate Master Plan by ARUP

On top of the winners' presentation, SIP also invited Frost & Sullivan to share their insights on the economic trends in Asia. It was a full house and attended by working professionals from various consultancy firms and agencies, including JTC, HDB, SJ, CPG, Henning Larsen, RSP, Morrow, etc.

After the sharing, SIP organised a panel discussion revolving around the topic of the Future of Economy and Industrial Planning in Asia.

The panel discussed insights on the different challenges and economic opportunities faced by different countries in Asia and how they each respond to the increasingly competitive market. For example, the rising trend of data centre in Malaysia and hence the push towards clean energy to support this growth while Indonesia is focusing more on public transport infrastructure and investment. The panel also discussed how Singapore could better position ourselves in the market while also retaining future flexibility in planning.

The last part of the programme was an organised site visit to two developments in JID, CleanTech Three by JTC and Surbana Jurong Campus by SJ. This visit allowed the participants to see firsthand how developments in JID respond to the Urban Design Guidelines (UDG) and enhanced the surrounding unique features of the estate.

In the coming months, we are planning more exciting events and programmes. Do check your emails, SIP LinkedIn and our Website for updates!

## SIP Events Updates

### Invitation to SIP Study Trip to Hong Kong: 26 Feb – 1 Mar 2025

We are excited to invite all SIP members to a study trip to Hong Kong from 26 February to 1 March 2025, jointly organized by Singapore Institute of Planners (SIP), Hong Kong Institute of Planners (HKIP), and Hong Kong Institute of Surveyors (HKIS). The trip will focus on two key subject matters: New Growth Areas and Urban Revitalization, offering an exclusive opportunity to explore Hong Kong's latest developments and sustainable initiatives shaping its future.

Thank you for your overwhelming response. Registration has closed and we will follow up with members who have registered for the trip. Do look out for highlights from our trip in the next Newsletter.



### FOR YOUNG PLANNERS – Chance to Win a Trip to HK!

SIP Video Challenge: Share Your Urban Story!

Ever felt inspired by a unique urban space, you wanted to share it with the world? Or have you ever been passionate about a specific urban topic that deserves a deeper dive?

Now's your chance to bring your insights to life! The SIP Video Challenge invites all young members of the SIP fraternity (40 years and below) to showcase their creativity and urban storytelling skills.

🎁 Prizes up for grabs:

🌟 Grand Prize: A 4-day, 3-night study trip to Hong Kong (26 Feb - 1 Mar 2025)

💰 2nd Prize: SGD 1,000 in cash

🏆 People's Choice Award: SGD 500 each for 3 winners

📅 Deadline for submissions: 27th January 2025

📄 How to Enter: Register through this link: <https://forms.gle/uk88beWkKwgwdsajt8>

📄 Refer to our LinkedIn Post for more info: [SIP Video Challenge](#)

We can't wait to see your creative videos and hear your urban insights.

Let's shape the future of our cities, one video at a time!

## SIP Mentor Program



We are pleased to announce that the registration for **SIP Young Planners Mentorship Programme 2025** is officially open!

Launched by SIP Young Planners Committee (SIP-YPC), this programme is all about connecting early-career planners and students with experienced mentors for a journey of knowledge-sharing, professional growth and network in the planning industry.

**Programme Duration:** April – September 2025

**Who's it for?** Motivated young planners and students eager to learn from seasoned professionals

### Interested in joining?

#### Mentees:

SIP Young Planners Members of students pursuing a related degree.

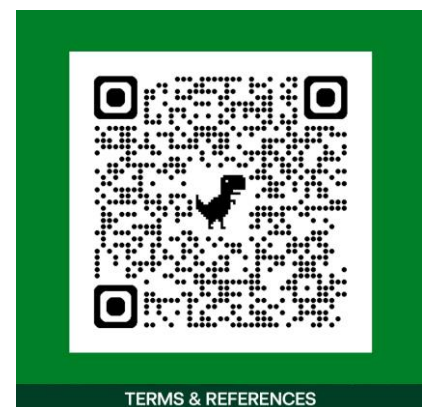
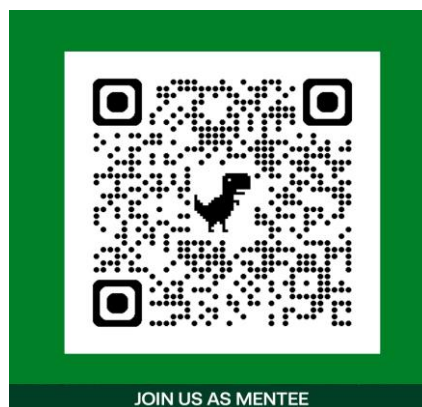
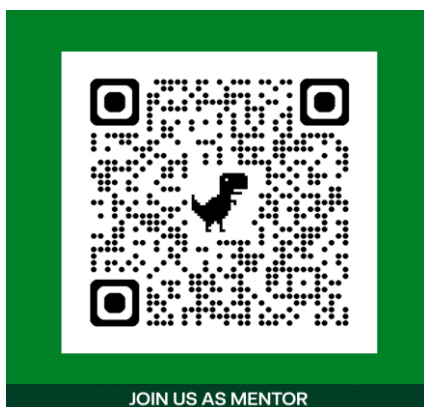
#### Mentors:

Experienced professional with over 5 years in the field, ready to share their expertise.

Limited slots available. **Register by 31st January 2025.**

Please scan the QR code for the program's Terms of Reference and Registration Forms to register your interest.

We look forward to your participation and trust it will be an enjoyable and enriching experience for all!



## SIP Membership Updates

We welcome the following SIP Members joining the Institute between 1 October and 31 December

Name	Member Type	Workplace
Alvin Chua Yung Hwa	Affiliate	National University of Singapore & Urban Redevelopment Authority
Koh Sze Ann Sean	Student	NA
Chen Yu-hsuan Michelle	Affiliate	Morrow Architects & Planners
Lin Yin	Affiliate	Surbana Jurong Private Limited
Kentaro Mabe	Affiliate	Mitsubishi Jisho Design Asia Pte Ltd
Wang Xuelu	Student	NA



The Singapore Institute of Planners (SIP) is a professional organisation established in 1971 which is dedicated to the advancement of sustainable urban and regional planning with a view to create better communities and environments.

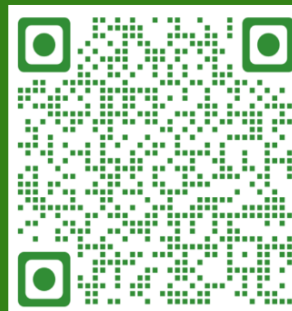
### Be part of SIP:

- Engage in professional development and networking within the planning community
- Support community-focused urban and regional planning & development
- Participate in events such as webinars, workshops, projects and site visits
- Share and contribute ideas and professional knowledge

### Membership categories:

- Honorary Fellow
- Fellow
- Certified Planners
- Full Members
- Recognised Planning Firm / Practice
- Affiliate Members
- Overseas Members
- Graduate Members
- Student Members

Please visit SIP website for details:



## Connect with us!

Do you know SIP is now on LinkedIn, YouTube and Instagram? Do connect with us and give us feedback on how we can improve. Share with us also what other contents you would like us to include in our newsletter and knowledge project. Your feedback is important to us as it helps us to better serve the Planning Community.

You can see highlights of the PlanEx Asia 2024 and SICP Award on our YouTube Channel! Do subscribe to keep updated with the happenings and behind the scenes contents!



<https://www.linkedin.com/company/singaporeinstituteofplanners>



<https://www.youtube.com/@singaporeinstituteofplanner5046>



<https://www.instagram.com/p/DAV3Cn8hkTs/igsh=MW1pb2x2eGtyOTB0Mg%3D%3D>



Website <http://www.planning.org.sg>

