



Singapore Business Mission

2017 | MISSION REPORT



Council of Mayors

South East Queensland

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Introduction

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01 Introduction

Since independence in 1965, Singapore has transformed from a country facing severe unemployment and a shortage of housing to one of the world's most prosperous nations.

Global leader

Singapore is recognised as a global leader in pioneering innovation, bringing business, government and communities together to deliver an holistic and integrated approach to furthering its economic development and quality of life for its citizens.

A small island, with a land area that sits between that of Redland and Logan City councils, Singapore is home to almost 6 million people. Through a modern and efficient public transport network, residents and visitors move seamlessly throughout the region.

While there is much to learn from this world leader in innovation, there are some key differences between Singapore and Australia that have assisted Singapore on its innovation journey.

Government

Most noteworthy, Singapore has only one level of government - national government and local government are one and the same. The city-state's form of government reflects the country's unusually small area and modest population.

Singapore has been governed by the same political party for more than fifty years. This is supported by strict laws and legislation (by Australian standards) which contribute to the nation's reputation as one of the cleanest, safest and most heavily regulated countries in the Asia Pacific region.

Global image

Singapore strongly values its forthright and corruption-free image, and the strong and positive relationships it shares with its Asia-Pacific neighbours, particularly Australia.



Model of Singapore at the Urban Redevelopment Authority (URA)



Mission themes

Council of Mayors (SEQ) proposed the 2017 Singapore Business Mission to explore four broad themes which demonstrate Singapore's dynamic response to the pressures of sustaining a growing population, creating connectivity across the region, and using collaboration to drive innovation.

Those themes are:

1

Smart city leadership

Singapore is an acknowledged global leader in Smart Cities and has committed to being the world's first Smart Nation. Focus areas for the mission under this theme included vision and rationale for investment, the horizontal elements of delivery (such as security, mass transit, city management), and possible applications of these findings to SEQ.

Infrastructure and logistics

Singapore is recognised as a world leader in the delivery of efficient and modern infrastructure. This mission searched for insights into Singapore's rapid mass transit and autonomous vehicles, urban development and integrated transport, and the nation's capability and experience in delivering and operating infrastructure abroad.

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Innovation

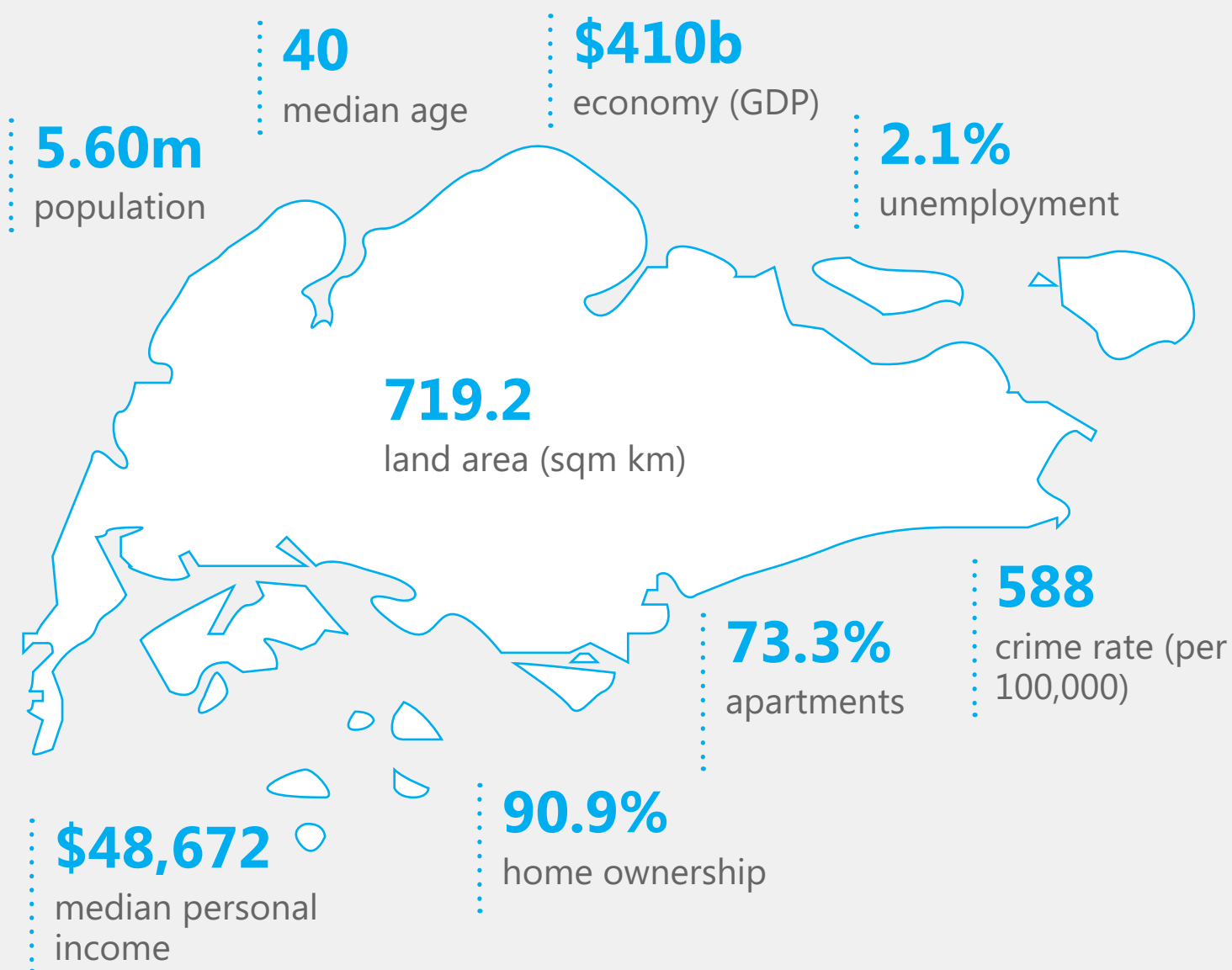
The mission aimed to unpack how different services and infrastructure are being digitised through smart innovation, with a focus on the drivers for investment in technology, the strategies supporting the roll out of advanced technology across various sectors, and lessons to be learnt from Singapore's digital journey.

Trade and investment

As an important trade and investment partner in South East Asia, this mission investigated opportunities for future two-way trade and investment discussions and to raise the profile of SEQ as a region full of business opportunities.

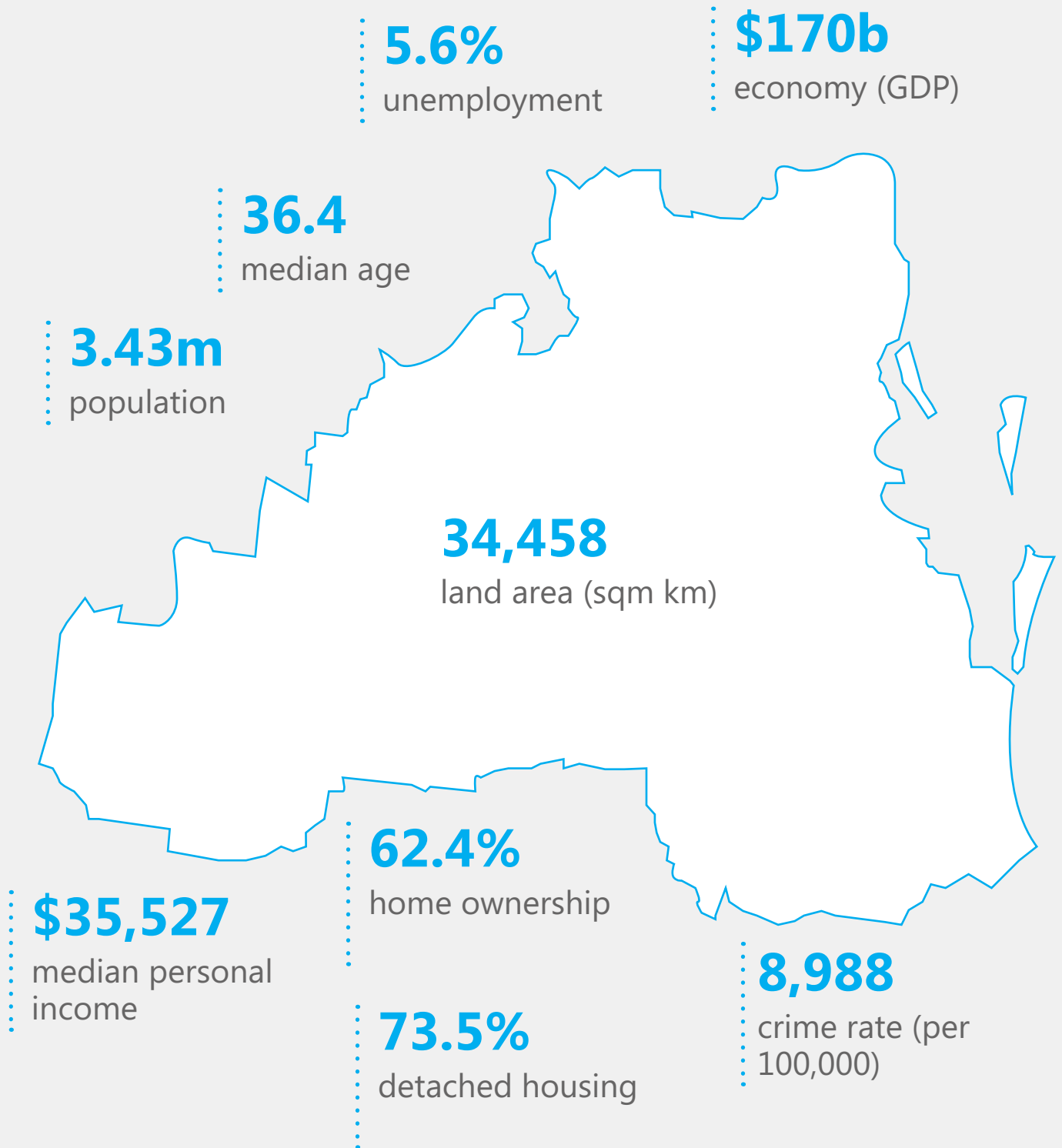
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Singapore



Source: Queensland Government, Singapore Government

South East Queensland (SEQ)



Not to scale

Mission overview

02

02

Mission overview

The **2017 Singapore Business Mission** covered many areas related to the four broad themes outlined. Delegates were particularly interested in how these themes could be explored to deliver real and valuable insights for SEQ.

Smart City leadership

One of the most significant observations was the collaborative and integrated approach to Singapore's Smart City agenda. Through strong leadership and a unified vision, the nation's embrace of innovation and digital technology is a mantra that permeates through all aspects of Singaporean life.

Singapore's Smart Nation agenda starts with putting citizens at its centre. The Smart Nation vision summarises this objective perfectly, to co-create a future of better living for all through tech-enabled solutions.

Info-Communications Media Development Authority (IMDA)

This was evident during the delegation's discussions with the Info-Communications Media Development Authority (IMDA). IMDA is a key enabler of Singapore's economic competitiveness, fostering technological innovation and collaboration between public and private sectors.

Discussions highlighted the need for government, business and the community to work together to prepare the region's infrastructure, economy and society for a future driven by advanced technology and innovation.

Singtel

Meetings with various Singtel executives demonstrated this concept. Singtel, part of the state-owned holding company Temasek, is the prime example as a pivotal player in Singapore's rise as one of the world's leading innovation nations.

Community engagement

Mayor of Singapore's North West District, Dr Teo Ho Pin, reminded the delegation that community engagement and genuine public participation remains a key component of Singapore's success, and an important activity for any government.



SMRT control centre for automated train operation



Delegation meets with the IMDA

Infrastructure and logistics

Delegates had the opportunity to delve into Singapore's world class public transport systems with a tour of SMRT's Operations Control Centre, Maintenance Workshop and Bus Training and Evaluations Centre.

SMRT

SMRT is Singapore's premier multi-modal land transport provider, delivering the nation's rail operations, maintenance and engineering, as well as bus, taxi and automotive services. Interestingly, SMRT also has significant investments in marketing, retail and property management.

The delegation was impressed by the efficiency and cost effectiveness of SMRT's transport systems, enabled by strong government support and a partially driverless fleet. The punctuality of SMRT's services sits at 99.6 percent.

Singapore's rail network is geared for efficiency with many of the lines either elevated or underground with air conditioning, innovative accessibility measures, e-payment and escalators that shuttle passengers 50 percent faster than the average escalator speed.

Train stations, particularly in inner city areas, are designed to be 'lifestyle hubs'. Featuring passenger services, shopping centres, residential towers, fitness studios and corporate suites, every inch of Singapore's limited land area is maximised to generate positive economic and community outcomes.

Driverless vehicles

A visit to Singapore's world-renowned Gardens By The Bay gave the delegation a chance to see the nation's innovative transport solutions in action. Gardens By The Bay is home to Asia's first fully operational driverless vehicle.

Known as the Auto Rider, the vehicle uses a combination of advanced sensors and lasers to enable it to navigate independently along a virtual, pre-encoded route. The vehicle is equipped to take 12 passengers, travel at a maximum speed of 40km/h and is battery operated.



Mayor Greg Christensen and Samantha Kennedy (Optus) exploring the autonomous vehicle prototype at SMRT



World's largest underground train depot (SMRT)

Urban Redevelopment Authority (URA)

Singapore's infrastructure, development and innovation comes together at the Urban Redevelopment Authority (URA), one of the final stops of the Singapore mission. A land use planning and conservation authority, the URA is tasked with setting the path for sustainable growth and development within Singapore's limited land area.

In a recurring theme of the mission, the URA recognises that planning alone is not sufficient to realise the nation's ambitious objectives. Therefore, the URA works closely with government, industry and the community to deliver the sense of greenery, calm and order that is a striking feature of Singapore's inner city.



Mayor Paul Antonio with a drone at the Information Exchange and Experience Centre hosted by Singtel

Innovation

Singapore's use of innovation as an economic and social enabler was evident at every turn of the Singapore mission. From education, recreation and civic services, advanced technology is playing a leading role in delivering efficient, accessible and cost-effective services to Singapore's citizens.

Public housing

The public housing structure in Singapore, where almost 80 percent of the population lives in government-developed apartments, allows for technology to be rolled out and maintained across a vast majority of the population.

As demonstrated during the delegation's visit to Surbana Jurong's Head Office, a series of cameras, sensors and applications offer seamless monitoring and management of Singapore's residential

estates. Lighting, security, traffic, energy, water and amenity are closely monitored as part of its Smart City services.

Smart city sensors

The use of data from various sensors to drive efficient asset management and prompt predictive maintenance was a valuable insight for the delegation, offering comparable solutions for SEQ councils.

Sensors are also playing a crucial role in monitoring Singapore's elderly population to enable ageing in place and keeping family units together for longer, a salient point given both nations' aging populations.

A visit to the FutureNow exhibit at the Singtel ComCentre gave the delegation a view of what technology can currently deliver in the way of Smart City management, and what are some of the opportunities and challenges for the future.

Smart city platforms

A demonstration of IntelliSURF, a smart city operating platform, showed the delegation how data from a wide range of sources (video, sensor, social media, mobile networks) can be analysed and displayed through a single user interface.

In doing so, IntelliSURF can detect emerging situations and create operational efficiencies through automated responses with standard operating procedures, notifications and supporting tools. It can also deliver an improved response by providing information and insights to first responders and on-ground staff.

Cyber security

On the flip side, Singtel also showed the delegation the increased threat that comes with advancing technology through a cyber security demonstration. Singtel showed the ease with which an attack can be initiated and how a breach on a government organisation's system may be executed.

Centre for Innovative Cities

One of the final stops for the mission was a visit to the Lee Kuan Yew Centre for Innovative Cities, a research institute which stimulates thinking around the critical issues of cities and urbanisation and explores how technology, design and policy can provide urban solutions.

The Centre has a unique approach to education and its role in innovation, with a structured curriculum that sets it apart from traditional universities. In addition to its unwavering focus on technology and design, it draws in expertise from architects, designers, engineers, social scientists, and urban planners to understand and address many of the complex issues of urbanisation.

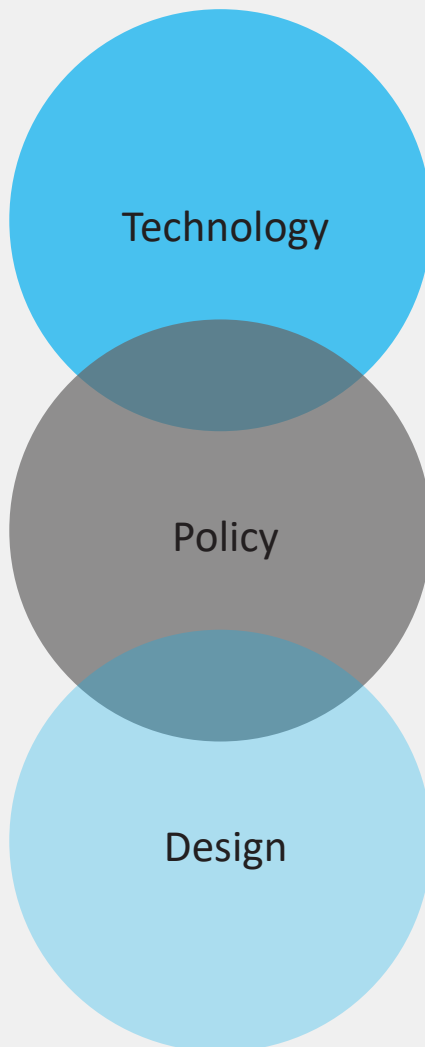
Centre Chair and Singaporean Ambassador-at-Large, Ambassador Chan Heng Chee, and her team shared valuable insights with the delegation regarding current research of relevance to SEQ and opened the door to further discussions following the Singapore mission.



Delegation meets with officials at the Lee Kuan Yew Centre for Innovative Cities

Centre for Innovative Cities

Lee Kuan Yew Centre for Innovative Cities, a research institute which stimulates thinking around the critical issues of cities and urbanisation explores how technology, design and policy can provide urban solutions.



Trade and investment

The Singapore Business Mission clearly demonstrated that a strong and lasting relationship between Singapore and SEQ is a win-win for both regions.

Constrained by land size, Singapore imports 90 percent of its fruit and vegetables and values the clean, high quality produce that SEQ offers. It enjoys close ties with Australia on several fronts, with a free trade agreement that has been in place between the two nations since 2003.

Conversely, SEQ has much it can learn about Singapore's meteoric rise as one of the world's leading innovators and how this can be harnessed to drive connectivity and economic growth.

The collaborative and coordinated approach by the SEQ Mayors' mission was well received by government and business leaders at both the High Commissioner's Reception and a Business Networking event hosted by Surbana Jurong.

Innov8 and Block 71

Discussions with Mr Edgar Hardless, CEO of Singtel's Innov8 Venture Capital Fund, and a visit to Singapore's Block 71, also provided some learning opportunities for SEQ in how it manages the emergence of its start-up culture and supporting facilities.

Home to more than 250 start-ups, 30 incubators, accelerators and venture capitalists, Block 71 is the epicentre of Singapore's innovation entrepreneur ecosystem. The facility started as a government experiment, where a disused industrial area was rented and sub-let to start-ups at affordable rates.

This focus of effort and location has created a thriving ecosystem of innovation, which continues to expand within the Block71 precinct and create opportunities for Singaporean start-ups internationally.

Trade and investment partnerships

The mission concluded with a series of meetings aimed at unlocking potential opportunities and lessons to foster better trade and investment partnerships between SEQ and Singapore.

The first of these discussions, facilitated by International Enterprise Singapore, was with Singaporean special vehicles company ST Kinetics.

ST Kinetics plays a key role in the advancement of Singapore's smart transportation network and the development of autonomous vehicle technologies. The company is currently in partnership with Singapore's Land Transport Authority to trial a series of automated vehicles in urban mixed traffic conditions across Singapore.

Importantly, these discussions revealed that ST Kinetics is already working with the Royal Automobile Club of Western Australia on Australia's first automated bus trial.

Benelux Produce and Toll Logistics

The delegation met with representatives from Benelux Produce and Toll Logistics to explore potential export opportunities in the Singaporean market.

Discussion around Singapore's heavy reliance on an external supply of fresh produce flagged plenty of opportunity for SEQ's producers. However, the challenges of enabling producers to be export ready and making the exercise financially viable were also raised.

Asian markets

Toll Logistics provided interesting insights into preparing SEQ's exporters for entering the Asian market. While Singapore can provide a gateway to the Asian region, there were unique differences and challenges presented by the various nations.

The session concluded with Toll providing an example of how exporters can better prepare for business within the Asian region, and offered to work with SEQ councils and exporters to be better prepared to engage with countries like Singapore.



Presentation from Mr Chia Wee Boon, CEO, NCS

Mission Follow-up

03

03

Mission Follow-up

This business mission has presented a number of follow-up actions that are provided below.

1. Singapore is a great location to establish regional headquarters for most Australian companies looking to conduct business with the South East Asian region. The Council of Mayors (SEQ) will continue to engage with Austrade, Trade and Investment Queensland and International Enterprise Singapore to learn more about initiatives like the “Landing Pad” that are available to support Australian businesses entering the Singaporean market.
2. Councils within SEQ will work to attract more of Singapore’s projected tourism expenditure for Australia in the coming years.
3. Individual members of the Council of Mayors (SEQ) Singapore Mission delegation will follow-up with SMRT executives to explore various commercial opportunities within the SEQ transportation sector.
4. The Council of Mayors (SEQ) will maintain a dialogue with SMRT regarding the role out of autonomous vehicles for use on main roads in Singapore to learn how legal and insurance issues are resolved. This information may inform future autonomous vehicle usage in SEQ.
5. The Council of Mayors (SEQ) will continue to promote the central role that government plays within Singapore’s Smart Nation agenda. Council of Mayors (SEQ) will take every opportunity to support post mission dialogue between relevant government agencies in Singapore and SEQ councils.
6. The Council of Mayors (SEQ) will maintain contact with all relevant government agencies and companies regarding how smart technology is being used in Singapore and how issues of privacy and safety are being managed.
7. The Council of Mayors (SEQ) will work with Singtel to explore how the Innov8 Venture Fund can better engage with the growing digital technology ecosystem in SEQ.
8. Individual members of the Council of Mayors (SEQ) Singapore Mission delegation will follow-up with Surbana Jurong executives to explore further commercial opportunities within SEQ.
9. The Council of Mayors (SEQ) will work with Easy Mile to assist them with their proposed Queensland Road Show in 2017 where they intend to have autonomous vehicle demonstrations at various sites throughout SEQ.
10. Individual members of the Council of Mayors (SEQ) Singapore Mission delegation will follow-up with Toll Global Forwarding to arrange workshops for SEQ businesses considering exporting products to South East Asia.
11. Individual members of the Council of Mayors (SEQ) Singapore Mission delegation will follow-up with Singapore University of Technology and Design to promote two-way information exchange and explore the potential for Centre for Innovative Cities doing work with councils in SEQ.

Itinerary Overview

04

04

Itinerary Overview

Monday 03 July

Meeting: Australian Trade Commission/ Trade & Investment Queensland

Presenter: Mr David Campbell (Senior Trade and Investment Commission, Austrade)

Key Observations

- Singapore is a country small in land area and population but a globally competitive economy.
- Some of the factors that underpin Singapore's competitiveness are strong institutions, a highly skilled and educated workforce, an emphasis on innovation, and good infrastructure.
- The country has been very successful in attracting foreign direct investment across various industries including biomedical and pharmaceutical manufacturing, financial services, logistics and digital industries.
- Singapore is well positioned to capitalise on the GDP growth coming out of the Asia-Pacific region.
- Singapore sees innovation as the key to driving economic growth in the future. As such, the country is investing heavily into research and development as well as developing collaborations with Australian research institutions.
- Singapore is one of Australia's top ten two-way trading partners.
- 60% of global multinational companies have regional headquarters in Singapore.
- Singapore acts as a regional hub for trade and investment in South East Asia
- Singapore continues to be a global trading hub in both sea and airfreight. Serving as one of the main gateways into Asia.
- There is room for growth in Singapore's tourism expenditure in Australia that SEQ may be able to capitalise on.

Meeting: SMRT Operations, Mass Transit Overview

Presenters: Mr Goh Eng Kiat (Managing Director, SMRT International), Mr Jonathan Khong (Deputy Managing Director, SMRT International)

Key Observations

- SMRT transport's main areas of business interest are multi-modal transport and business solutions. Multi-modal transport include rail systems, buses, taxis, personal rapid transit, and group rapid transit vehicles. Business solutions includes property leasing, advertising, engineering/ consultancy, and maintenance.
- Many of SMRT's business units operate synergistically with each other allowing for excellent end-to-end customer experience.
- As Singapore's leading public transport operator, SMRT provides first class service delivery as benchmarked against the world's leading metro providers.
- SMRT works closely with the housing authority to contribute to integrated lifestyle and transport developments in Singapore.
- SMRT has an international footprint that spans throughout Asia, Europe, The Middle East, and South America. The company is actively pursuing the Australian market.
- SMRT is a strategic partner and shareholder in a Dutch-based company (2getthere) that is developing an automated transit network. SMRT has the exclusive rights for the Asia Pacific market.
- SMRT currently utilises driverless systems for the metro in Singapore.
- SMRT are field testing autonomous vehicles for road services.
- A driverless minibus is being tested at Macquarie Park in Australia
- SMRT's autonomous vehicle is ready for a mixed traffic environment in Singapore. The issues delaying deployment of the autonomous vehicle are regulatory and insurance.

Monday 03 July (cont.)

Meeting: Tour of SMRT Control Centre and Maintenance Facility

Presenters: Mr Jonathan Khong (Deputy Managing Director, SMRT International), Mr James Low (Deputy Director, Control Operations,)

Key Observations

- Nearly six out of 10 Singapore residents take public transport to work every day.
- Singapore residents depend on public transportation and have high expectations in terms of reliability, safety, and cleanliness of service at an affordable price.
- SMRT operates cost efficient trains that have a 99.6% punctuality and 95.8% safety record.
- SMRT services its autonomous train fleet at a state of the art facility which is the largest underground train services depot in the world. The maintenance depot also relies on an autonomous warehouse and distribution system to supply parts to service the trains.
- The metro train fleet provides data to the maintenance depot which moves parts autonomously from the warehouse to appropriate trains for servicing.
- Metro operations are closely monitored with video and data provided to SMRT's control centre to ensure efficient and safe movement of passengers throughout the network.

Meeting: Intro to Bus Operations and Tour of Bus Training & Evaluation Centre

Presenters: Mr Kwek Hyen Chee (Director SMRT Buses), Mr Tan Kian Heong (Managing Director of SMRT Buses & Roads Services)

Key Observations

- SMRT Buses serve 368 million commuters annually with more than 1 million commuters daily.
- Travel by bus is the predominant form of public transport taken daily in Singapore.
- Several years ago, the Singapore Land Transport Authority transitioned to a bus contracting model where bus operators bid for bus routes by packages and paid a service fee to run the bus services.
- SMRT is the second largest public bus operator in Singapore with 22% market share.
- SMRT is competing for human capital with other industries in Singapore. The company has uplifted the profession of bus driving by changing the titles of drivers to "bus captains".
- SMRT provides extensive training and driver performance evaluations with bus simulators, driver data analysis, and ongoing training based on data analysis.

Meeting: Infocomm Media Development Authority of Singapore (IMDA)

Presenters: Ms Yip Yuen Fong (Advisor, Digital Readiness Cluster, IMDA)

Key Observations

- IMDA is one of the key agencies at heart of the Smart Nation agenda in Singapore.
- IMDA's main role is to bring together industry, society, and government to transform Singapore into a Smart Nation.
- The four areas of focus for IMDA in the digital transformation of Singapore including cybersecurity, immersive media, internet of things, and data analytics/artificial intelligence.
- IMDA works with companies like Singtel to ensure that there is pervasive connectivity deployment throughout Singapore.
- IMDA is working with the Sentosa Development Corporation to use Sentosa Resort Island as a collaborative test bed for a variety of smart technologies to enhance customer experience.
- IMDA is working with primary and secondary schools to encourage digital making experiences for students.
- IMDA has partnered with schools and commercial partners to create Lab On Wheels mobile digital making learning lab.
- The Lab On Wheels purpose is to ignite students' passion for tech via engaging and experiential activities. Introduce students to computational thinking and makers mentality.
- School that have participated in the Lab On Wheels program have seen a 24% increase in students' interest in computer science.

Meeting: Government Networking Reception

Presenters: Mr Bruce Gosper, Australian High Commissioner Singapore

Key Observations

- The High Commissioner recognised the importance of regional collaboration and engagement with local government officials from Australia.
- Australian local governments generate much more attention and interest from Singapore business and government organisation when presenting aggregated information regarding investment, trade, and tourism opportunities.
- The Singapore attendees represented a diverse group of businesses and government organisations.
- Some of the Singaporean attendees included the following: Olam International, Agricorp International, Benelux Food and Flowers, Ambassador-at-Large with the Singapore Foreign Ministry.

Tuesday 04 July

Meeting: Information Exchange and Experience Centre: Singapore Telecommunications Ltd (Singtel) Overview

Presenters: Mr Bill Chang (Chief Executive Officer, Group Enterprise)

Key Observations

- Singtel is the Asia-Pacific's largest multimedia group and the largest ICT partner with Singapore's Smart Nation Program.
- Singtel is keen to co-develop smart city solutions with government and/ or other businesses.
- Singtel is building deep capabilities as enablers in the following domain areas: analytics, artificial intelligence, robotics, internet of things, public safety, cyber security, and healthcare.
- Issue of privacy needs to be addressed as new technology is being developed and deployed.
- Singtel is working with various organisations in Australia to showcase smart technology. One example is the Smart Campus work being done with Latrobe University through Optus.

Meeting: Information Exchange and Experience Centre: Singapore Telecommunications Ltd (Singtel) SMART Nations Initiatives

Presenters: Mr Chia Wee Boon (Chief Executive Officer, NCS)

Key Observations

- NCS provided a live demonstration of the IntelliSURF platform – a sophisticated big data visualisation engine that allows different government agencies to achieve real-time situational awareness of the country.
- Some of the key focus on NCS's Smart Nation initiatives are next generation infrastructure, an ecosystem of partners to accelerate innovation, strategic partnerships with large organisations and start-ups to enable experimentation.

Meeting: Information Exchange and Experience Centre: Singapore Telecommunications Ltd (Singtel) Innovation Walkabout

Presenters: Ms Yvonne Lim (Innovation Evangelist, Singtel)

Key Observations

- Dataspark is a service that uses data and location analysis to create powerful insights for better planning of government and business services.
- Use cases included emergency services, housing, advertising, tourism, and retail.
- Data can be obtained from video, wifi, mobile, and customer to create compelling customer insights.
- Singtel provided live demonstrations of robots used in healthcare industries as well as surveillance and drone technology used in a variety of industries.

Meeting: Information Exchange and Experience Centre: Singapore Telecommunications Ltd (Singtel) Cyber Security Briefing

Presenters: Mr William Woo (Managing Director, Enterprise Delivery and Managed Services)

Key Observations

- Singtel provided a tour of the Advanced Security Operations Centre and demonstrated how networks, systems and platforms are secured for Governments and private enterprises.
- Cyber-crime is now recognised as the number one economic crime in the world.
- Every major organisation in the Asia Pacific region has been hacked. Intellectual property, financial information, critical infrastructure, etc. is all vulnerable to cyberattack and/ or theft.
- Ransomware has become a very lucrative industry with 98% of Asia Pacific companies having been victims.
- There is a critical lack of cyber-security talent to defend enterprises and government.
- Beware of free WiFi!

Meeting: Block 71(Innov8) Innovation District Tour/ Presentation

Presenters: Mr Edgar Hardless, CEO, Singtel Innov8 Venture Capital Fund

Key Observations

- Singtel's Innov8 was established as a separate entity from Singtel.
- The two main roles of Innov8 are (1) scouting & investment and (2) business & portfolio development of digital technology start-ups.
- Innov8 is a strategic venture capital investor in technology start-ups that can do one or more of the following for Singtel: (1) provide insights into new markets and technology (2) develop next-generation products & services and (3) generate cost savings.
- Innov8 is building an ecosystem in Singapore, western US, Israel and Australia. There are 3 technology scouts based in Australia (including Brisbane). Optus works with Fishburners in Brisbane.
- Innov8 annually evaluates 1000 start-ups to identify 10 investable tech start-ups.
- Innov8, NUS Enterprise, and MDA collaborated in 2011 to turn light industrial area Block71 into a one-stop start-up hub.
- Block 71 has grown from 1 incubator in 2011 to 50 incubators/ accelerators that are home to 750 start-ups and 2000 entrepreneurs in various stages of development.
- The Australian Trade and Investment Commission has its Landing Pad facility located in Block 71. Australian start-ups that are accepted to be part of the Landing Pad have access to work in a collaborative workspace and referral to business support services for a period of up to 90 days.

Tuesday 04 July (cont.)

Meeting: Surbana Jurong (SJ) / Smart City Operation and Management

Presenters: Mr Joe Keen Poon (Smart Cities Lead, Surbana Jurong)

Key Observations

- Surbana Jurong provided a live demonstration of the Predictive Lift Operations and Maintenance Analytics systems used in several housing estates throughout Singapore.
- Sensors installed in lifts can collect real-time data to predict when lifts may need maintenance.
- Lift maintenance and repair shifted from being reactive to proactive, drastically increasing residents' satisfaction ratings which SJ closely monitors.
- Video monitoring and analytics are also used to monitor cleanliness and suspicious behaviour on lifts.

Meeting: Singapore Town Councils

Presenters: Dr. Teo Ho Pin (Mayor of North West District)

Key Observations

- Town Councils were formed in 1989 to empower local elected representatives and residents to run their own housing estates. Similar to a body corporate organisation.
- Elected Members of Parliament (MPs) are empowered to lead Town Councils and decide on local estate management matters.
- Town Councils are not a separate level of government and a very different to local councils in Australia.
- Dr. Teo Ho Pin gave a brief description of how SJ provides services within his North West District.
- Politically, it is very important for mayors of town councils to ensure that excellent customer service is provided to residents within their town councils.

Meeting: Business Leaders Dinner hosted by Surbana Jurong/ SMEC

Presenters: Mr Eugene Seah, Surbana Jurong (Senior Director, Special Projects)

Key Observations

- Several business and government representatives attended the event. Some of the organisations in attendance included the following: ANZ, Surbana Jurong, Singtel, Nanyang Technology University, developers and SMRT.
- Several follow-up meetings were scheduled take place in Singapore and SEQ between various members of the CoM delegation and Singaporean organisations in attendance.

Wednesday 05 July

Demonstration: Gardens By The Bay - Auto Rider

Presenters: Mr Ralf Josef Gresch (Director of Visitor Services) Mr Joe Keen Poon (Smart Cities Lead, Surbana Jurong)

Key Observations

- Gardens By The Bay is an iconic tourism destination that attracts millions of visitors each year.
- The Singaporean government invested large sums of money to ensure that the facility is a world-renowned attraction.
- Visitors can be transported, upon entry to the grounds to the Gardens via an autonomous minibus.
- The CoM delegation was given demonstration rides on the autonomous minibus by Easy Mile, which is the company that manufactures the vehicle. The temperature controlled vehicle travels on designated routes throughout the grounds without a driver.
- Easy Mile is currently trialling the vehicle in Australia, with plans to conduct demonstrations/ trials in SEQ this year.
- Some of the features in the Gardens, such as the waterfall, were modelled off natural features in the Scenic Rim national parks.

Lee Kuan Yew Centre for Innovative Cities (LKYCIC), Singapore University of Technology and Design

Presenters: Prof. Chan Heng Chee (Chairperson, LKYCIC)

Key Observations

- Professor Chan Heng Chee holds the title of Ambassador-at-Large with the Singapore Foreign Ministry. She was formerly Singapore's Ambassador to the United Nations.
- The centre is made of up makers, doers and thinkers for innovative cities.
- The centre works with Mayors of Towns in Singapore and abroad.
- The four main areas of research and activity are the future of cities, Smart Nation program, Ageing cities, and the international design centre.
- The future of cities area focuses on the need for a people-centred approach to innovation. Some of the research questions being addressed include:
 1. How do you bring innovation skills to a region?
 2. How do you integrate humans with machine?
 3. How do you recognise and address the job losses that will occur due to technology disruption?
- The ageing cities area focuses on the following research questions;
 1. How do you address older persons relationships with their communities/ neighbourhoods?
 2. How do you consider planning and designing age-friendly neighbourhoods?
 3. How do you test the use of sensors to monitor the health of elderly residents?

- The international design centre focuses on the following:
 1. Bringing design thinking to urban problems, in partnership with MIT.
 2. Assisting in the development of Virtual Singapore.
 3. Running a Design Futures Studio.
 4. Assisting in the design of the Singapore University of Technology and Design which is relatively new campus in Singapore.
- Several members the CoM delegation invited members of the research team to visit SEQ.

Meeting: Urban Redevelopment Authority

Presenters: Ms Yap Lay Bee (Director, Urban Design East) and Mr Colin Lauw, Senior Manager (Community Outreach and Programming).

Key Observations

- There was great emphasis placed on seeing urban design as a partnership with the community.
- The Singapore City Gallery had interactive and static exhibits spanning 3 floors and over 2,400 square metres which included one of the world's largest architectural models – the Central Area model.
- The exhibit highlighted Singapore's incorporation of green space throughout the city.
- It was clear that Singapore has managed urban density very well.

Meeting: ST Kinetics (Land systems and specialty vehicles)

Presenters: Ms. Kandasamy Krithika (Head, Operations & Marketing- Smart Transport, Kinetics Advanced Robotics)

Key Observations

- ST Kinetics was the first to deploy self-driving vehicles in Asia.
- The minibus being used at Gardens By The Bay is a partnership between ST Kinetics and Easy Mile.
- ST Kinetics intends to deploy several vehicles in Singapore in mid-2018.
- 15 minibuses will be used at airports, hospitals, and business parks.
- A 40-seater bus is currently being developed.
- Trials of the some of the vehicles are being planned for sites throughout Australia.
- Vehicle trials are taking place in Bordeaux and Switzerland on open roads.
- Members of the CoM delegation discussed cost of purchasing and leasing the vehicles.

Meeting: International Enterprise Singapore (IE Singapore)

Presenters: Mr Kenneth Sim (Divisional Director, Southeast Asia & Oceania Group, IE)

Key Observations

- Singapore is the premier business centre for South East Asia.
- The country has a good distribution network and partnerships throughout the world.

- Singapore is the perfect platform for trading into Asia.
- IE is very interested in opportunities for Singaporean companies to pursue business in the Smart City Solutions space in Australia.
- Singapore is also very keen to identify new suppliers of quality food products from Australia.
- Singaporean developers prefer large development opportunities.
- IE is keen to continue to engage with the Council of Mayors (SEQ).

Meeting: Trade and Investment sessions

Presenters: Linda Ong (Managing Director, Benelux Flowers & Food), Guek Hong TOH (Project Manager, Benelux Flowers & Food), Jason Wilson (General Manager – South East Asia, Toll Global Forwarding), Amie Luah (General Manager – Retail and Business Development – Asia Pacific, Toll Global Logistics Division)

Key Observations

- Benelux Flowers and Food
 1. 90% of Singapore's food is imported. Bilateral trade relationships are highly valued.
 2. Benelux not only services the Singaporean market, as an importer of premium fruit and vegetables, but services several countries in South East Asia.
 3. Benelux has a long well-established relationship with Queensland farmers but is always in search of new suppliers.
 4. Benelux is looking to work with suppliers who are export ready. It is critical that suppliers can ensure they can supply sufficient volume and quality of fruit and veg.
- Toll Global Forwarding
 1. Toll have been owned by Japan Post Holding Company since 2015.
 2. The company has operations in more than 50 countries.
 3. Toll is the leading provider of logistics services in Asia.
 4. The company has a strong e-commerce capability – both systems and solutions.
 5. Toll has a new major cold storage facility 5km from Changi Airport.
 6. Singapore represents a great trading base for accessing the rest of Asia.
 7. Cotton-On is a great example of an Australian business that uses Singapore as a springboard into the rest of Asia.
 8. Several members of CoM delegations invited Toll to come to SEQ to present to local business interested in exporting to South East Asia.

Acknowledgements

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Acknowledgements

Delegates

Elected Members

- **Cr Paul Antonio**, Mayor, Toowoomba Regional Council – Deputy Chair Council of Mayors (SEQ)
- **Cr Karen Williams**, Mayor, Redland City Council – Treasurer Council of Mayors (SEQ)
- **Cr Luke Smith**, Mayor, Logan City Council
- **Cr Allan Sutherland**, Mayor, Moreton Bay Regional Council
- **Cr Greg Christensen**, Mayor, Scenic Rim Regional Council
- **Cr Adrian Schrinner**, Deputy Mayor, Brisbane City Council
- **Cr Wayne Wendt**, Ipswich City Council, Deputy Chairperson- Economic Development, Tourism and Digital City Committee

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- **Mr Derek Ephrem**, Economic Development Coordinator, Council of Mayors (SEQ)
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- **Mr Daryl Hitzman**, CEO, Moreton Bay Regional Council
- **Ms Jane Frawley**, Director of Innovation and City Transformation, Logan City Council
- **Ms Kirby Orr**, Chief of Staff, Logan City Council
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Corporate Delegates

- **Mr Jonathan Powell**, Manager Business Development- QLD/NT, SMEC (Member of SJ Group)
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About Council of Mayors (SEQ)

The Council of Mayors (SEQ) was established in September 2005 as an independent political advocacy organisation to represent the interests of one of the nation's fastest growing regions – SEQ.

We are Australia's largest regional local government advocacy organisation, representing the one in seven Australians who call SEQ home.

The membership of the Council of Mayors (SEQ) consists of the 11 Mayors representing the Councils of SEQ: Brisbane, Gold Coast, Ipswich, Lockyer Valley, Logan, Moreton Bay, Redland, Scenic Rim, Somerset, Sunshine Coast and Toowoomba councils.

With five out of the ten largest Councils in Australia in SEQ, the region is no longer just a series of disparate geographic areas but a region that, in practical terms, functions as a single metropolitan area.

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