

KEY FINDINGS

Knight Frank takes a look at infrastructure across the Asia-Pacific region, focusing on transport corridors and urban mass transit systems – and their impact on residential markets

New metro lines in Singapore, Bangkok, Tier 1 cities in China and India; and the high-speed link between Guangzhou and Hong Kong are some of the projects highlighted; along with residential areas we expect to benefit the most (see pages 6-11)

In our regional residential snapshot; the Chinese housing market starts to turn, Thailand remains resilient, Malaysia sees new cooling measures and Australia continues to see strong price performance (see page 3)

8 of the 11 mainstream residential markets in Asia-Pacific saw house prices increase in Q1 2014, as reported in Knight Frank's Global House Price Index



NICHOLAS HOLT

Asia Pacific Head of Research

"As the modern day city continues to expand... a more complex network of urban transport infrastructure continues to influence populations and housing markets."

TRANSPORT INFRASTRUCTURE AND RESIDENTIAL HOTSPOTS

The positive impact of transport corridors and urban mass transit systems on house prices

Housing markets have historically emerged around transport infrastructure: whether dwellings bordering key roads; towns that have grown up next to river crossings; or cities that have developed around sea ports.

As the modern day city continues to expand, both outwards and upwards, spreading beyond traditional boundaries and creating new skylines of densely populated towers – a more complex network of urban transport infrastructure continues to influence populations and housing markets.

Commuters travelling daily in their millions, freight deliveries, business supply chains, tourists and visitors in their thousands, all rely on transport systems to move them efficiently around a city. And the continued growth of cities, fuelled by urbanisation, has increased the pressure on public authorities to ensure transport infrastructure is able to cope with swelling numbers while keeping a city internationally competitive. These challenges are especially acute in certain parts of emerging Asia, where cities are growing at such a rapid pace, that a historic lack of planning and investment has meant that infrastructure development is playing catch up sometimes from quite far behind.

In our comprehensive analysis of residential markets around the world, we see the impact of new transport corridors and changes in urban mass transit systems on areas and house prices.

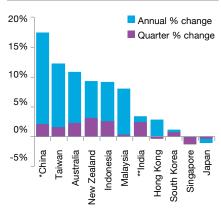
While new transport infrastructure does not have a universally positive impact on residential pricing (indeed there are some negative externalities associated with infrastructure such as noise), we commonly witness outperformance and new residential hotspots emerge, as access improves and travel times around the city are reduced.

In this edition of the Asia-Pacific Residential Review, following a snapshot of some of the key news in residential markets across the region (see page 3), we focus on this topic of urban transport infrastructure.

A brief regional overview is covered before our research teams around the region draw attention to a number of infrastructure projects that we feel will make a difference to localised residential markets in key Asia-Pacific cities. We highlight the type of infrastructure project, the development timeline, and the areas we believe will be impacted – potential or actual hotspots.

There is undoubtedly potential for outperformance for those who follow infrastructure developments ahead of the market. Changes in infrastructure – new transport corridors and metro systems – can stimulate and open up parts of a city, attract investment, extra demand for housing and bring a new energy to areas.

FIGURE 1 Global house price index Q1 2014



*Based on Beijing and Shanghai **Data from Q4 2013

Source: Knight Frank Research



Regional snapshot

In Australia, residential markets across the state's capitals continued to perform well, with the decision by the Reserve Bank of Australia (RBA) to leave the cash rate unchanged at 2.5% likely to keep price growth in positive territory. The government meanwhile has ordered a review of the regulations surrounding foreign buyers into the Australian market, with concerns surrounding the significant amount of Asian buyers active in the new build sector. As at Q1 2014, prices across the eight state capitals increased on average by 10.9% year-on-year.

Cambodia saw its real estate market start to reach a wider audience with the launch of a number of residential projects overseas. The nascent condominium market has attracted interest from Chinese, Japanese and Singaporean investors who are attracted to the freehold title and the significant potential for capital growth.

After a continued rise over the past few years, house prices in **China** have started to turn in a number of cities. Developers who are under pressure to shift inventories, have been increasingly turning to promotions such as "zero down payment", most notably in second and third Tier Chinese cities. Some local authorities have taken steps to ease their curbs on home purchases in order to boost demand.

The **Hong Kong** housing market continued to see prices suppressed by the various cooling measures. The recent government proposal for a minor

relaxation on Double Stamp Duty is expected to boost buyer sentiment and transaction volumes in the coming months. The impact on prices however is expected to be limited as long as the other property cooling policies remain in place. The mainstream market saw prices decline by 0.4% in Q1 2014.

India experienced a wave of optimism on the back of Narendra Modi-led National Democratic Alliance (NDA) winning the national election. Even prior to the election, expectations of a regime change saw Knight Frank's Sentiment Index improve, with stakeholders increasingly positive about the outlook for the residential market over the coming quarters. In 2013, house prices increased nationally by 3.4%.

The political backdrop is also impacting sentiment in **Indonesia**, with the upcoming elections bringing about a wait-and-see environment to the housing market. The Jakarta condominium market, which has seen some of the highest price rises across the region over the last two years, saw its growth slow in 2014.

The recent increase in consumption tax (from 5% to 8%) in **Japan** is still being digested by the market. Developers, who are already facing rising costs, due to higher labour costs and the depreciating yen – will see the cost of inputs now increase further, potentially reducing the amount of private housing starts. Purchasers meanwhile, will pay the new higher rate on the value of the building (they do not pay consumption tax on the apportioned land value).

Similarly in **Malaysia**, the market is also starting to anticipate the introduction of a Goods and Services Tax (GST) for the first time in 2015. Although GST will not be applicable on direct residential property purchases, it will increase input costs for developers. The market is therefore expected to see some cost push inflation in 2015. Meanwhile, the increase of Real Capital Gains Tax (RPGT) for both domestic and foreign buyers (up to 30% if disposed of within a year) and tighter lending conditions has contributed to a fairly subdued housing market performance.

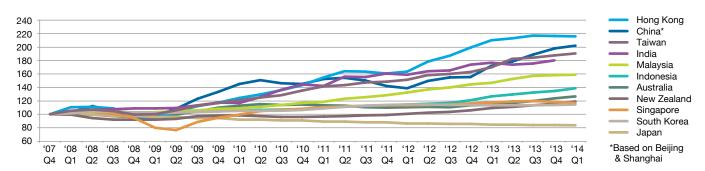
New Zealand saw its bull market continue, as nationwide house prices increased by 9.2% year-on-year as at Q1 2014. The major cities of Auckland and Christchurch continue to lead the surge in prices, as they have done since 2009.

The Total-Debt-Servicing-Ratio (TDSR) of 60%, introduced in June 2013 in **Singapore** continues to impact the market. High-end condominiums and apartments saw the biggest price falls, with Knight Frank's Prime Global Cities Index recording a 13% drop over Q1 2014

In **Thailand**, the political uncertainty over the past six months has not, as yet, had a significant negative impact on prices of centrally located Bangkok condominiums. Although price growth has been more subdued, prime condominiums in Bangkok still saw a 2% increase in prices in Q1 2014, with demand remaining robust. A number of international developer launches have, however, been put on hold until the domestic political situation stabilises.

FIGURE 2

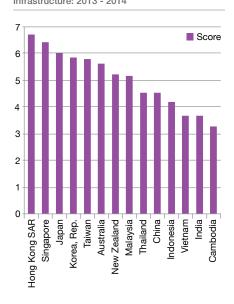
Global house price index
(Q4 2007 = 100)



Source: Knight Frank Research

"Urban mass-transit systems have a more obvious impact on a more local, residential level."

FIGURE 3 Global competitiveness index Infrastructure: 2013 - 2014



Source: World Economic Forum, Knight Frank Research

SPECIAL ANALYSIS

The level of infrastructure in a market is a useful indicator as to the level of development while also a guide to the potential for catch-up. A more localised analysis can also point us to where some of the best residential investment opportunities lie.

Road and rail networks, telecommunications, dams, bridges and power plants – are all critical for the efficient functioning of an economy. A lack of infrastructure can seriously hold back a country or city's development, knocking percentage points off potential growth rates. Investment into infrastructure, whether in emerging, developing or advanced economies is essential to maintain or even enhance growth trajectories.

Hong Kong leads the way regionally and globally

Looking broadly at infrastructure development on a national level, the Asia-Pacific region shows significant diversity. According to the Global Competitiveness Index, calculated by the World Economic Forum, Asia has three of the top 10 countries worldwide ranked in terms of infrastructure – Hong Kong taking first place, Singapore second and Japan ninth place (see fig. 3).

Hong Kong's efficient and comprehensive local and regional transport systems, world leading telecommunications and connectivity, and advanced sea and air cargo systems remain the key reasons for Hong Kong's placing at the top of the index.

China an increasingly important player in developing Asia

China, despite its relatively low position on the Global Competitiveness Index, is the largest spender on infrastructure projects in the world, having funnelled a huge amount of capital into the sector over recent years. The country is also a key exporter of capital, increasingly involved in overseas infrastructure project financing around the region; from the Kunming-Singapore railway line, to projects across developing Asia. This is not only being driven by a desire to invest its accumulated capital overseas, but also to boost its geopolitical influence in the region. The proposed USD 50 billion Asian Infrastructure Investment Bank (AIIB), which is expected to rival the Asia Development Bank (ADB) and is largely backed by the Chinese government, is another sign of China's increasingly regional role in physical infrastructure development.

The AIIB, ADB along with other sources of finance (non-bank) will be important in developing Asian markets such as India, Indonesia, Cambodia, Vietnam and Myanmar over the coming years. These sources of capital will aim to fill the gap in infrastructure financing and boost investment into a sector which has historically had difficulties attracting potential participants, due to timeframes, political risk, cost overruns and illiquidity.

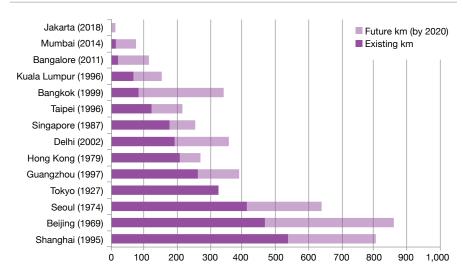
Trains, planes and automobiles

Returning to the subject of transport infrastructure and its impact on residential markets, we must distinguish between different levels of infrastructure; national, intra-regional, and local. While airports, national rail networks and interstate highways are all indispensable elements of transport infrastructure, urban mass transit systems, within a city's boundaries, have a more obvious impact on a local, residential level.

Indeed, new or improved urban transport networks can open up an area of a city and be a catalyst for urban renewal. These factors, along with reduced travel times for commuters and businesses can



FIGURE 4 Metro systems* in key Asia-Pacific cities Opening year of the first metro system in parentheses



*The International Association of Public Transport (L'Union Internationale des Transports Publics, or UITP) defines metro systems as urban passenger transport systems, "operated on their own right of way and segregated from general road and pedestrian traffic.

Source: Knight Frank Research, local transport authorities, public sources

all have a positive impact on residential

Urban transport infrastructure metro systems

With this in mind, if we take our analysis down to the city level, and look at one of the most important and common forms of urban public transportation - metro systems, we can see a significant amount of diversity. Across key cities in Asia, there are not only significant existing levels of metro line, but a huge amount of new lines pipelined over the next five years. Indeed, nearly 70% of additional metro lines are either under-construction or planned for completion between now and 2020 (see figure 4). While metro systems have a high capital cost, take many years to plan and build, they have proved to be one of the most efficient ways of transporting people throughout

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Of the cities analysed, Tier 1 Chinese cities have the most significant amount of new line planned over the coming years; while elsewhere Mumbai has just opened its first metro line, and Jakarta is scheduled to open its first metro line in 2018.

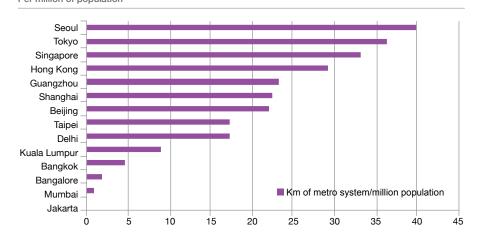
Tokyo, the first metro system in the region (opened in 1927), together with Seoul, form two of the most developed metro systems in the region. On a kilometre per million of population basis (a crude but interesting measurement see fig. 5), we can see that Seoul tops the regional rankings with 40km of metro line provided to every million residents, followed by Tokyo and Singapore with 36km and 33km respectively.

While the population density of each city will vary somewhat, it shows relative urban metro densities in these cities and is perhaps a good indicator of the potential for catch-up over the coming years.

Housing and infrastructure

Why is all of this important? Well, firstly it shows the room for growth in developing Asia - where we expect the most extensive infrastructure development to occur over the coming years. And secondly, as infrastructure changes, evolves and is created, it will open up areas and create opportunities. Many studies have shown the positive impact on prices for houses within proximity to new public transportation, most notably metro systems, tram, suburban railway and bus stations. We now take a look at some of these opportunities in more detail.

Kilometres of metro system Per million of population



Source: Knight Frank Research, local transport authorities, public sources

"Seoul tops the regional rankings with 40km of metro line provided to every million residents..."

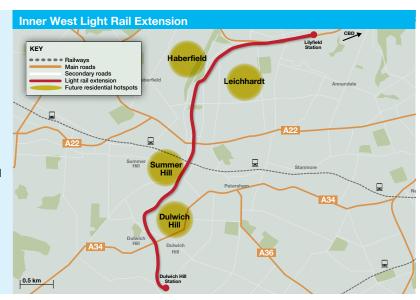


AUSTRALIA Sydney

The recently completed extension to Sydney's light rail network has added nine new stops between Lilyfield and Dulwich Hill; connecting train and bus routes in the Inner West as an alternate passage to the Sydney CBD.

In the three months leading to the maiden journey in March 2014, apartment prices in the suburbs of Leichhardt, Haberfield, Summer Hill and Dulwich Hill averaged capital growth of 3.6%, trending above the 2.3% experienced across Sydney.

Michelle Ciesielski, Residential Research, Australia

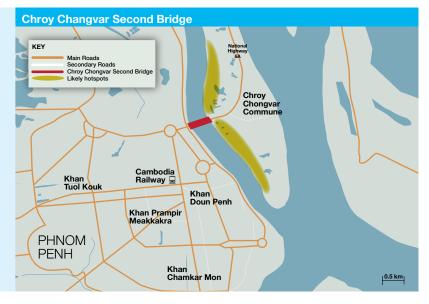


CAMBODIA Phnom Penh

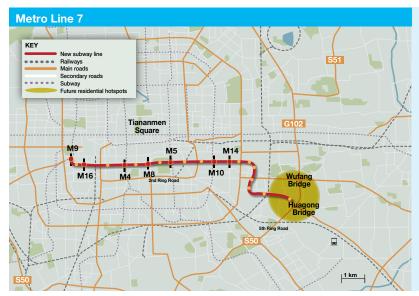
Since the Chroy Changvar Second Bridge commenced construction in 2011, we have seen a flurry of activity in Chroy Changvar Commune, with residential developers eager to take advantage of the improved accessibility to an area that occupies prime river frontage located a mere 2.5 km from the Central Business District.

With the bridge due for completion in 2014, market prices in this location are expected to record healthy increases over the medium to long term, further supported by the widening of National Road 6A and the beautification of the river front.

Ross Wheble, Country Manager, Cambodia







G. CHINA Beijing

Line 7, with a total length of 23.7 km and 21 stops, is expected to be completed by the end of 2014. The area around Wufang Bridge and Huagong Bridge along 5th Ring Road should become a hotspot. These two bridges are around 1km from Jiaohuachang Station, at the end of Line 7.

House prices in this area are currently in the range of RMB 23,000 - 30,000 per sq m. When Line 7 is launched, transportation in this area will be improved dramatically, which is expected to drive up the house prices by over 20%.

David Ji, Head of Research & Consultancy, Greater China



G. CHINA Guangzhou

Scheduled for completion in 2016/17, Metro Line 21 is likely to benefit Guangzhou Science City, which is one of the major new areas of the city. The area has been comprehensively planned by the government and will benefit from a variety of new transport infrastructure projects currently under construction. According to plans, there are two metro lines including Line 21 and phase two of Line 6 which will run through the area. The current house prices in the area stand at approximately RMB 15,000 - 20,000 per sq m, much lower than that of the eastern part of Tianhe District, providing significant potential for outperformance.

Ocean Ruan, Research & Valuation Mgr., Guangzhou

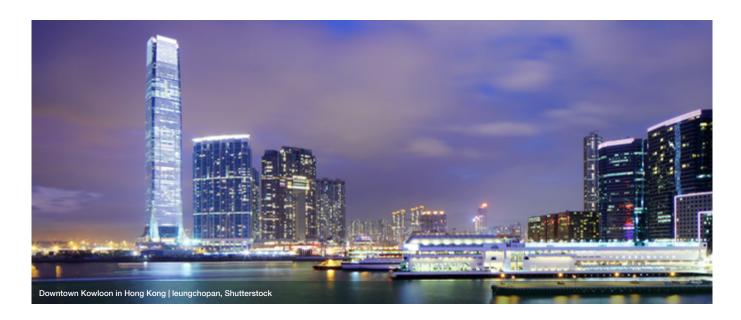


G. CHINA Shanghai

Shanghai Metro Line 17 (also known as the Qingpu Line) is a metro line that is planned to be completed in 2017/2018. The line starts at Hongqiao Railway Station in Minhang District, running to Oriental Land in Qingpu District. The new line will be 35.2 km in length and consists of 13 stations. The line will interchange with lines 2 and 10.

The commuting time from Qingpu to downtown Shanghai will be shortened significantly, therefore proving a boost to the area, where residential markets are expected to outperform.

Regina Yang, Head of Research & Consultancy, Shanghai



G. CHINA Hong Kong

The 26-km Guangzhou-Shenzhen-Hong Kong Express Rail Link is expected to open in 2015, running from the terminus in West Kowloon to Shenzhen. Travelling times will be reduced to 14 minutes between Hong Kong and Futian (Shenzhen), to 23 minutes between Hong Kong and Shenzhen North and 48 minutes between Hong Kong and Guangzhou South.

This is expected to benefit Hong Kong's residential sector, particularly luxury residential projects near Kowloon Station and Austin Station, by bringing in potential buyers directly from the Mainland of China.

David Ji, Head of Research & Consultancy, Greater China

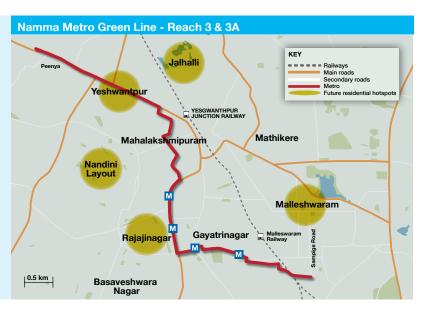


INDIA Bengaluru

Bengaluru witnessed the launch of the second Metro rail stretch in March 2014. The 9.9 km line of track connects the city's north-western suburbs in Peenya to Sampige Road in the west.

The announcement of the new line has already led to an appreciation in residential property prices in locations like Malleshwaram and Rajajinagar. More new residential projects are expected to come up along the stretch at competitive prices, added to scope for redevelopment of older properties, particularly in the industrial areas of Peenya. Considerable interest from home buyers is expected in these areas, owing to improved connectivity.

Sangeeta Sharma Dutta, Lead Research Consultant, Bengaluru





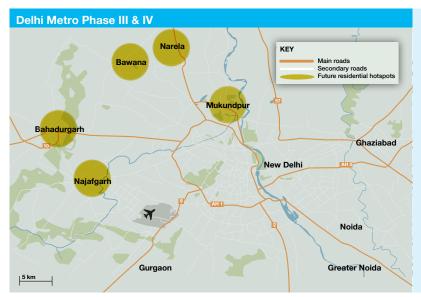


INDIA Mumbai

The Mumbai Metro project is arguably the only effective mass rapid transport system that is conceived to connect the heavily populated central and western zones of Mumbai. Recently opened, the 11.4 km first phase of Versova – Andheri – Ghatkopar metro line is expected to greatly enhance the residential appeal of locations along this route providing great potential for price outperformance. Areas such as Ghatkopar, Sakinaka and Versova are expected to see the most appreciation as their access to office hubs in the Andheri – Malad belt are enhanced to a great extent now the metro has become operational.

Yashwin Bangera, Lead Consultant, Mumbai





INDIA NCR

Delhi Metro's Phase III & IV will give a free rein to the potential of the distant areas of NCR especially in the North and West. Phase III, slated to be completed by 2016, will bring down the travel time between several interchange stations. Phase IV, on the other hand, will connect and unbridle the development potential of the peripheral areas.

In particular, locations like Bahadurgarh, Narela and Bawana are seen as the future hotspots for real estate development. A lot of traction is expected in these areas in the coming years, leading to residential price appreciation.

Ankita Sood, Consultant, National Capital Region

INDONESIA Jakarta

Phase one of the Mass Rapid Transit (MRT) line will stretch along the Sudirman to Lebak Bulus area. While to the north of the line, the Sudirman and Thamrin areas (considered as prime CBD) have seen land appreciate by 30% - 40% since last year; the Lebak Bulus area is anticipated to become a new emerging hotspot on account of MRT line connectivity. This will attract investors to develop mixed-use property, and purchasers looking to benefit from reduced travel time. For these reasons, land prices are expected to outperform by more than 20% until the officially announced completion of the MRT line in 2018.

Hasan Pamudji, Associate Director, Indonesia

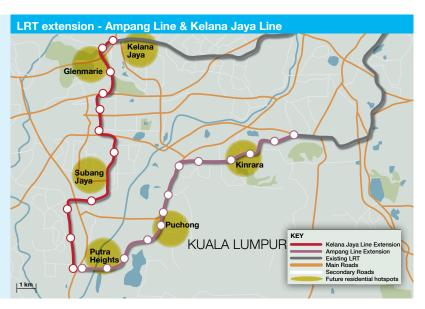




MALAYSIA Kuala Lumpur

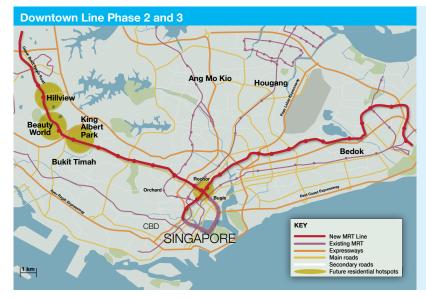
Expected to complete in 2016, the Light Rail Transit (LRT) extensions of the Ampang and Kelana Jaya lines are expected to reduce travel times for districts served by stations along these lines significantly. We expect residential projects near the key stations along the two LRT lines to perform well, including Subang Jaya-USJ, Putra Heights, Kelana Jaya, Glenmarie, Kinrara and Puchong. Puchong-Kinrara, Bukit Jalil and Subang-Sunway are the three key hotspots we are highlighting for potential outperformance.

Judy Ong, Executive Director, Malaysia





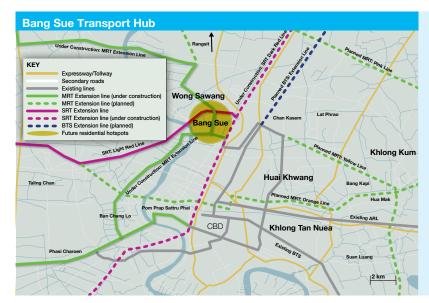




SINGAPORE Singapore

Stages 2 and 3 of the Downtown MRT Line (DTL), set for completion in 2016 and 2017 respectively have already led to value enhancements of private non-landed residential developments around future stations. Prices of developments situated within 500m of the future Hillview, Beauty World and King Albert Park stations along Upper Bukit Timah Road (District 21) and Rochor station (District 7) have seen prices surpass the 20.5% average increase in the Outside Central Region (OCR) non-landed private residential price index, since the announcement of alignment plans for DTL Phase 2.

Alice Tan, Research Director, Singapore



THAILAND Bangkok

The Bang Sue Hub, to the north of the city, is set to become a large terminal where many mass transit lines will intersect. The station, which is currently served by the MRT Blue Line, is planned to be joined by the MRT Dark Blue Line in 2016 (north south line); also by State Railway of Thailand (SRT) Dark Red Line in 2017 (towards Rangsit); and an extension of the Airport Rail Link by 2017. Due to these infrastructure developments, we are witnessing the redevelopment of the surrounding areas with a significant uptick in interest from developers. The area is set to become a residential hotspot in the coming years.

Risinee Sarikaputra, Research Director, Thailand



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