

THE MRT EFFECT ON PRIVATE HOME PRICES



"With benefits of enhanced transport connectivity, proximity to MRT stations generally augments price growth of private homes, albeit with temporal moderation during MRT construction phase."

ALICE TAN Director and Head Consultancy and Research Singapore's Mass Rapid Transit (MRT) system has greatly improved transport connectivity and enhanced land use possibilities for the island state. According to statistics released in the Singapore Land Transport: Statistics in Brief 2014, the MRT system currently comprises 5 main rail lines, more than 100 existing operational stations and boasts an average daily ridership exceeding 2.5 million. The last decade saw the completion and commencement of operations for the Circle Line (CCL) and the Downtown Line Stage 1 (DTL 1). While the CCL is essentially an orbital circle line mainly providing accessibility to most parts of the Central Region, the Downtown Line (DTL) seeks to connect the north-western and eastern regions of Singapore to key activity nodes such as the Central Business District (CBD) (Exhibit 1). With the reduction in travelling time and high level of convenience that commuters enjoy from the MRT network that connects various suburban regions to the city centre, decentralization of workplaces and residences can be actualized. Evidently, the extension of the MRT network has increased the attractiveness of residential developments near MRT stations, and supported residential property price growth.

The MRT Effect and the Proximity Impact on Property Prices

Although MRT stations generally have a positive price effect on surrounding residential developments, it is observed that prices tend to fluctuate throughout different stages of the development life cycle of the MRT station, with prices occasionally trending lower during the construction period. Knight Frank Research conducted an analysis to investigate average price movements of surrounding private residential properties before and after announcement of an MRT station, during construction till completion phases for selected MRT stations along DTL and CCL networks.

Shortly after the announcement of MRT alignment plans, owners of residential developments situated in the immediate vicinity of the station usually benefit from the initial heightening of homebuyers' interest, which is likely to translate into potential price upside. Analyzing caveats lodged for private residential developments located within a 500-metre radius of selected DTL MRT stations, average new sale and resale prices generally trended upwards, with those developments situated near Bedok Reservoir MRT station seeing the largest percentage price increase (i.e. 33.9 per cent) over a two-year pre- and post-announcement period (see Exhibit 3). This percentage rise also outperformed the 33.3 per cent increase recorded in the Urban Redevelopment Authority (URA) All-Residential Property Price Index over the same period, with such price differential likely to be attributed to the premium commanded from the MRT station that potential homebuyers were willing to pay for the added convenience of having a MRT station in close proximity. The notable large increase also stemmed from an increasingly upbeat market in a new environment of low interest rates from 2010 to 2011 period.

In the post-announcement period, homeowners are likely to benefit from higher price upsides for properties that are of closer proximity to an MRT station. Further analyzing the price changes of specific developments within the vicinity of Bedok Reservoir MRT station, the largest percentage price increase over a two-year pre- and post-announcement period arose in Baywater (21.0 per cent) which is situated at less than 100m from the station (See Exhibit 4). On the other hand, the percentage price increase was notably the lowest for Aquarius by the Park, which is situated at about 400m away from the station.

New launches near MRT stations could also set new price benchmarks following the announcement of a station location.



Capitalizing on many homebuyers' desire for greater convenience and better transport accessibility, the MRT effect could be factored in by developers to roll out new units at higher average selling prices. Looking at new development launches within the vicinity of Bedok Reservoir MRT station, new sale average prices rose sharply by 32.8 per cent to \$1,004 psf in the one-year post-announcement period. Such price escalation was supported by developments such as Waterfront Key, of which new sale prices soared by 32.3 per cent to \$1,013 psf over the same period.

Although the announcement of a station location could help to drive up prices for properties within its immediate vicinity, such capital appreciation is normally short-lived once MRT infrastructure works commence. Negative externalities such as construction noise and traffic disruptions that prevailed during the construction phase adversely affected the overall environmental conditions surrounding nearby developments and subsequently, impacted property values. Based on caveats lodged data analysis, average prices of private residential developments situated near selected CCL and DTL stations slipped over a one-year period after the commencement of construction. In the case of average prices for developments situated near Bedok Reservoir MRT station, the decline was significant at 9.8 per cent (see Exhibit 5).

Commencement of Operations: Same Rail Line, Different Value of Stations

After the completion of the MRT station, the final stage of possible property price adjustment could materialise when the station begins operations and the convenience offered by the MRT station is experienced by residents living in the vicinity. Comparing the price changes of private residential properties situated within close proximity of selected stations on the fully-completed CCL, it is observed that developments near Paya Lebar MRT station recorded the highest price growth post-commencement of operations, with a notable 10.6 per cent increase to \$806 psf in the one-year period after the CCL began operations (see Exhibit 6).

Such notable increase in prices could be partly attributed to the added advantage that the station is concurrently situated on the East-West Line, which brings another dimension of convenience to commuters and therefore, accounted for an additional price premium for such private homes near Paya Lebar MRT station.

Although an MRT line improves transport connectivity and accessibility for residents living within the immediate vicinity of its stations, the MRT effect post-commencement might differ depending on the precise location of the station. Looking at the price changes for private residential developments near selected CCL stations, the average percentage price increase for Lorong Chuan MRT station is comparatively higher than that of Holland Village MRT station (see Exhibit 6). The MRT effect is likely to be more pronounced in OCR areas where accessibility to stations is a big plus, especially if these areas are farther away from the city-centre. In suburban regions such as Lorong Chuan, a larger proportion of residents place greater reliance on public transport to reach the city-centre as well as to other parts of the island. As such, MRT stations become more crucial to the transportation needs of residents in these suburban areas and hence, the introduction of a station in these areas is likely to trigger higher price expectations and premiums over developments further away from the station.

Outlook for **Thomson-East Coast** Line and Possible "Hotspot" Stations

The Thomson-East Coast Line (TEL), whose stations were announced in August 2014, will form Singapore's sixth MRT line once it fully completes in year 2024. The TEL will enhance overall accessibility and reduce travelling time to major activity nodes such as the CBD for residents living in the suburban regions. For instance, with the commencement of operations, the TEL will halve travelling time from Marine Parade to Shenton Way to 20 minutes.

With the TEL bringing unprecedented access to the city-centre for commuters residing in the eastern parts of Singapore properties near new stations along the

East Coast stretch of the rail line are expected to see potential capital appreciation once the line commences full operation. Similarly, residents living in the north region are likely to benefit from the TEL, given that they are currently underserved by the existing public transport system. With no other MRT stations within a 2-km radius, the Springleaf MRT station is expected to be heavily depended by residents living in the nearby Thong Soon and Springleaf estates to gain better accessibility to the city-centre. Zooming into the Central Region, another "hotspot" station is likely to be Stevens MRT station. Apart from the station serving as an interchange for commuters on the DTL and upcoming TEL, it is also just one stop away from Botanic Gardens station which lies on the CCL. Such convergence of rail lines makes the station a highly sought-after transit point providing near-islandwide accessibility.

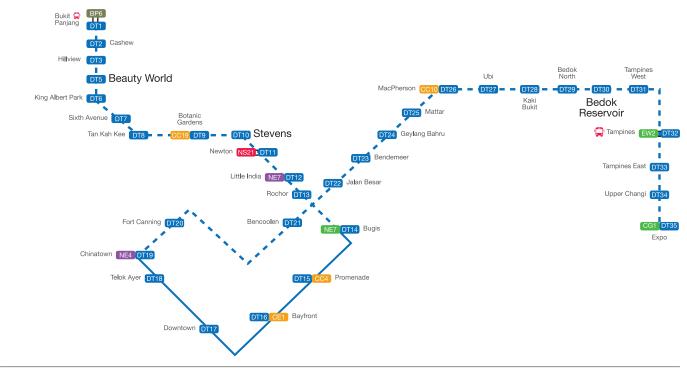
All in all, while the introduction of an MRT station generally pushes up the asking prices of developments situated within the vicinity of the station, whether such price expectations can be achieved highly depends on the overriding property market conditions at that point in time. Based on the 4Q 2014 URA quarterly statistics, the slated completion of approximately 69,000 private residential units over the next 5 years would imply greater competition for homeowners genuinely keen to dispose their properties.

A private home unit being in close proximity to an MRT station would provide a point of differentiation and offer more value for potential homebuyers.

Extracts of this Research House View were published in The LianHe ZaoBao Property Supplement article "地铁站对私宅价格的 影响" dated 4 April 2015.

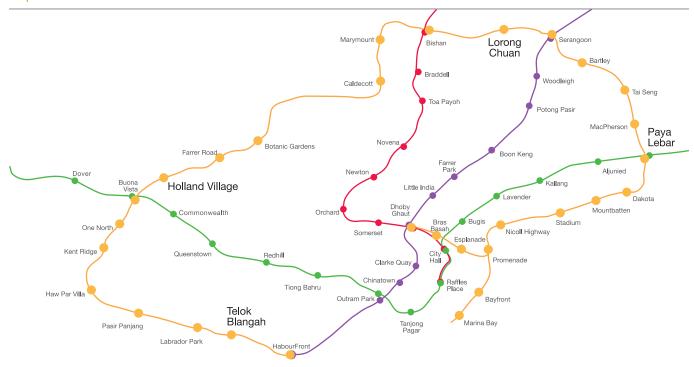


EXHIBIT 1 Map of Downtown Line



Source: Land Transport Authority, Graphics by Knight Frank Research

EXHIBIT 2 Map of Circle Line and Other Main MRT Lines



Source: Land Transport Authority, Graphics by Knight Frank Research



EXHIBIT 3

Average Prices (New Sale and Resale) of Private Residential Properties within 500m of Selected DTL Stations, 1-Year Pre- and Post-Announcement

Downtown Line MRT Station	Market Segment		Average Quarterly Prices (\$ psf)			
		Announcement Quarter	1-Year Period Before Announcement	1-Year Period After Announcement	% Change	% Change in URA All-Residential Price Index
Beauty World	RCR	3Q 2008	\$513	\$556	8.4%	-3.6%
Stevens	RCR	3Q 2008	\$1,202	\$1,215	1.1%	-3.6%
Bedok Reservoir	OCR	3Q 2010	\$727	\$974	33.9%	33.3%

Source: Land Transport Authority, REALIS (based on caveats as at 13 February 2015), Knight Frank Research

EXHIBIT 4

Average Prices (New Sale and Resale) of Private Residential Properties within 500m radius of Bedok Reservoir MRT station, 1-Year Pre- and Post-Announcement

Development Name	Distance from MRT station		Average Quarterly Prices (\$ psf)					
		Tenure Type	Announcement Quarter	1-Year Period Before Announcement	1-Year Period After Announcement	% Change	% Change in URA Non-Landed OCR Price Index	
Baywater	60m	99-Year	3Q 2010	\$671	\$812	21.0%		
The Clearwater	180m	99-Year	3Q 2010	\$664	\$801	20.6%	30.9%	
Aquarius by the Park	380m	99-Year	3Q 2010	\$651	\$778	19.5%		

Source: Land Transport Authority, REALIS (based on caveats as at 13 February 2015), Knight Frank Research

EXHIBIT 5

Average Prices (New Sale and Resale) of Private Residential Properties within 500m of Selected MRT Stations, at and during 1-Year Period after Commencement of Construction

MRT Line	MRT Station Name		Average Quarterly Prices (\$ psf)			
		Construction Commencement Quarter	Commencement of Construction	1-Year Period After Construction of Commencement	% Change	% Change in URA All-Residential Price Index
Circle Line	Lorong Chuan	3Q 2003	\$500	\$498	-0.4%	-2.3%
Downtown Line	Bedok Reservoir	4Q 2011	\$1,055	\$952	-9.8%	8.8%

Source: Land Transport Authority, REALIS (based on caveats as at 13 February 2015), Knight Frank Research

EXHIBIT 6

Average Prices (New Sale and Resale) of Private Residential Properties within 500m of Selected CCL Stations, 1-Year Pre- and Post-Commencement of Operations

Circle Line Station Name	Market Segment					
		Commencement of Operations	1-Year Period before Commencement of Operations	Commencement of Commencement of	% Change	% Change in URA All-Residential Price Index
Telok Blangah	RCR	4Q 2011	\$1,931	\$1,926	-0.3%	8.8%
Holland Village	RCR	4Q 2011	\$1,466	\$1,515	3.3%	8.8%
Paya Lebar	RCR	2Q 2010	\$729	\$806	10.6%	52.3%
Lorong Chuan	OCR	2Q 2009	\$683	\$742	8.6%	3.8%

Source: Land Transport Authority, REALIS (based on caveats as at 13 February 2015), Knight Frank Research

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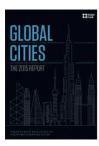
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