บริษัท อนันดา ดีเวลลอปเม้นท์ จำกัด (มหาชน)

<u>เอกสารแนบ 5</u>

รายงานสภาวะอุตสาหกรรมโครงการคอนโดมิเนียมและบ้านจัดสรร

# BANGKOK CONDOMINIUM AND HOUSING MARKET REPORT

Presented to:

Ananda Development Public Co., Ltd.

7th September 2012



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### Preface

CB Richard Ellis (Thailand) Co., Ltd. has been instructed by Ananda Development Public Company Limited to prepare a report that provides

- A general overview of the property market with specific commentary on the impact of mass transit systems.
- 2. An overview of the downtown and midtown condominium markets with specific focus on one bedroom units.
- 3. An overview of the housing market specifically in East Bangkok.

This independent expert report, dated 7 September 2012, was prepared to be included in documentation (including but not limited to any prospectus or offering circular) to support the Initial Public Offering of Ananda Development Public Company Limited.

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Mr. James Pitchon Executive Director For and on behalf of CB Richard Ellis (Thailand) Co.,Ltd.

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# Preface

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# Preface

#### **GLOSSARY OF TERMS**

ARL:	Airport Rail Link
BMA:	Bangkok Metropolitan Administration
BMR:	Bangkok Metropolitan Region (Bangkok, Nakorn Pathum, Nonthaburi, Samut Prakan, Pathum Thani and Samut Sakorn)
BOI:	Board of Investment of Thailand
BOT:	Bank of Thailand
BTS:	Bangkok Mass Transit System
CAGR:	Compound Annual Growth Rate
CBD:	Central Business District
FDI:	Foreign Direct Investment
GDP:	Gross Domestic Product
IMF:	International Monetary Fund
MRT:	Metropolitan Rapid Transit
MRTA:	Mass Rapid Transit Authority of Thailand
NESDB:	National Economic and Social Development Board
NSO:	National Statistics Office
PAD:	The People's Alliance for Democracy
PPP:	People's Power Party
SDH:	Single-Detached House
SEC:	Securities Exchange Commission
SET:	Stock Exchange of Thailand
SRT:	State Railway of Thailand
TH:	Townhouse
UDD:	United Front of Democracy Against Dictatorship



### **Executive Summary**

With a 2010 GDP growth rate of 7.8%, the Thai economy was one of the fastest growing economies in Southeast Asia. However, in 2011 Thailand experienced negative GDP growth of 0.1% primarily due to economic disruption resulting from facing the worst flood in 50 years. At the end of 2011, the World Bank estimated that economic damages and losses due to the flood were THB 1,425 billion. The severe flood affected export, investment, consumption and tourism. Nevertheless, the World Bank has forecasted Thai GDP growth to rebound to 4.5% in 2012 on the back of post-flood reconstruction and rehabilitation efforts. This is further supported by the government's effort in increasing the minimum wage and starting salaries of bachelor's degree holders.

The continued effort to improve infrastructure, especially the mass transit systems, is expected to strengthen domestic demand and investment and consequently the Thai economy as a whole. In the next 3-5 years, the government expects to see a total of 44 new stations that branch out more than 50 km west and south of Central Bangkok. The extension of the BTS Dark Green Line (4 stations from Wong Wien Yai to Bang Wa) is underway and is expected to be completed in February 2013. The construction of the two new MRT lines (Purple Line, 15 stations and Blue Line, 20 stations) is also expected to be completed in 2016. In addition, the SRT Light Red Line (5 stations) has recently been completed and expected to operate in 2013 at the latest. The development of Bangkok's mass transit systems has greatly impacted property development patterns in Bangkok.

In 2006, passenger numbers for the BTS and MRT were approximately 620,000. With the addition of the ARL in 2010, mass transit passenger numbers are now approaching 1 million per day. This number will grow when new lines are completed in 2016.

The completion of the initial mass transit system with the opening of the BTS in 1999 and MRT in 2004 and subsequent extensions of these lines have changed the location preferences of Bangkok residents in terms of where they want to work, live and shop. CBRE believes that the condominium market is primarily an end-user driven market and demand for condominiums located along mass transit routes will continue to grow with the limitations being affordability and minimum size of unit. The mass transit systems will continue to be extended and this will result in both high numbers of overall users and increased usage of the downtown mass transit network that has been completed.

Further, changes in social patterns, demographics and affluence have resulted in the emergence of a new class of Thai end-user purchasers, who are single, affluent and prefer living in the city rather than staying with their families. Single Thais are now moving away from their family home and buying a property before getting married. Not only is household size decreasing, but the average age of marriage for both men and women is also increasing. Following the trend seen in the rest of Asia, Bangkok households are moving from extended households to nuclear family households. The preferred choice of property for this new group of buyers is city centre and midtown, one-bedroom condominium developments located close to mass transit stations. CBRE believes that demand for one-bedroom condominium units next to mass transit stations will continue to grow. This has created fresh demand for one-bedroom condominium market.

Growth in the mass transit condominium market has not adversely affected demand for traditional low-rise housing including single-detached houses and townhouses. Onebedroom condominiums do not match every family's accommodation requirements and there is still demand for townhouses and single-detached houses. Buyers in this market are all end-users with no buy-to-rent investors or speculators. There is very little trading in previously occupied landed houses because Thai buyers prefer to buy new landed homes.



### **Executive Summary**

Housing in areas that were not flooded in 2011 has increased in popularity. The market is driven by accessibility, affordability and usability in terms of the size of the house plot and useable built area. The East of Bangkok has grown in popularity particularly on the back of significant road improvements that were made when Suvarnnabhumi Airport opened.



#### **OVERVIEW OF THAILAND ECONOMY**

#### **GDP of Southeast Asian Countries**

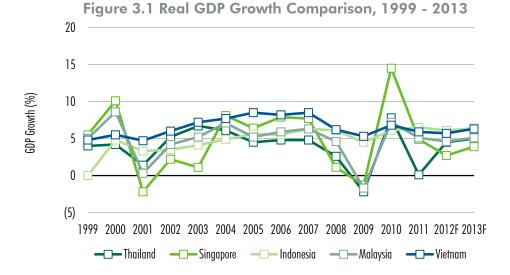
As a result of the 2008 Global Financial Crisis, Thailand's annual GDP growth fell to -2.0% in 2009. In 2010, the Thai economy rebounded with a GDP growth rate of 7.8% despite experiencing political unrest, surpassing Vietnam (6.8%) and Indonesia (6.1%), making it the fastest growing economy in Southeast Asia by GDP growth rate, after Singapore.

Thailand's GDP growth declined to 0.1% in 2011, mainly due to the flood crisis, which caused the economy to contract by 9.0% in Q4 2011. Nonetheless, GDP growth projections remain positive. According to the World Bank report "East Asia and Pacific Economic Update, May 2012 - Capturing New Sources of Growth", Thailand's forecasted GDP growth remains quite strong at 4.5% and 5.0% in 2012 and 2013, respectively.

Similarly, the National Economic and Social Development Board (NESDB) has forecast 2012 GDP growth to be 5.5-6.5%. Key to GDP growth is the recovery and growth of the manufacturing sector and government investment in flood prevention systems and post-flood rehabilitation. Public investment expenditure is expected to grow by 13.0%. Other factors driving the economy include the continued growth of private consumption, the low unemployment rate, increase in public servants' salaries, and the increase in the minimum wage and starting salaries of bachelor's degree holders. Exports are expected to remain strong; however, the volatility of external environments may threaten to lower the volume of Thai exports.

Over the past decade, Thailand's strong economic growth has caused the World Bank to reclassify Thailand from a Middle Income Country to an Upper Middle Income Country. According to a World Bank senior economist for Thailand, the country's THB 1.5 trillion post-flood rehabilitation projects will translate into a GDP growth rate of 1.5%.

Source: World Bank, NESDB and BOI of Thailand



Note: Singapore's annual GDP growth for 2011, 2012F and 2013F figures are from IMF because the World Bank has not released the figures when CBRE obtained the data. (July 2<sup>nd</sup>, 2012)

Source: Index Mundi 2010, World Bank and IMF



#### **Political Overview**

Over the past years, Thailand's economy has been affected by political unrest; in particular the events of the coup in 2006 and political crisis in 2008.

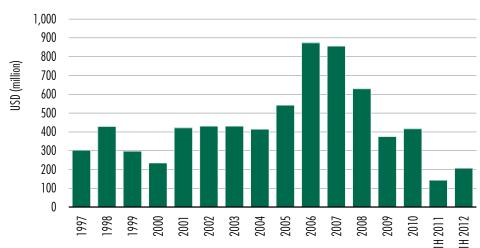
In 2006, Thaksin Shinawatra, the prime minister of Thailand, was ousted through a military coup and between 2006 to 2011 Thailand had experienced political unrest and clashes including the political crisis in 2008 when a conflict between the anti-government People's Alliance for Democracy (PAD) and the People's Power Party (PPP) ensued. The clashes in 2010 between protesters and the military resulted in a severe contraction in Thailand's tourism sector. In 2011, Yingluck Shinawatra, of the Pheu Thai Party, became the first female prime minister of Thailand.

Prime Minister Yingluck's government has since implemented several policies that have proved popular among the majority of Thais. The policies include an increase in the minimum wage rate, an increase of public servant's salaries, a cut in corporate tax, an increase in rice subsidies and numerous infrastructure projects.

#### **Foreign Direct Investment**

Thailand has experienced a steady growth in net FDI since 1997 peaking at USD 873 million in 2006. However since 2006, Thailand has experienced a decline in FDI due to the ongoing European debt crisis, flood crisis and political unrest. The flood crisis caused THB 400 billion in damages to Thailand's manufacturing base and gave investors a negative perception of investing in Thailand. However, investor confidence is expected to return due to a recovery in the manufacturing and real estate sectors.

Accordingly, FDI grew by 45% from USD 141.4 million in the first half of 2011 to USD 205.6 million in the first half of 2012. The industry sectors that have the highest foreign investments are metal products, machinery, transport equipment and electronics, while the largest investors tend to be Japanese.



#### Figure 3.2 Average Net Flow of Foreign Direct Investment, 1997 - 1H 2012



Source: Board of Investment of Thailand

#### **Inflation and Unemployment**

From 2000 to 2012, Thailand's inflation rate averaged 2.7%. As of June 2012, the BOT reported that headline inflation was 1.9% and core inflation was 2.6%. The BOT has set a target core inflation rate of between 0.5% and 3%.

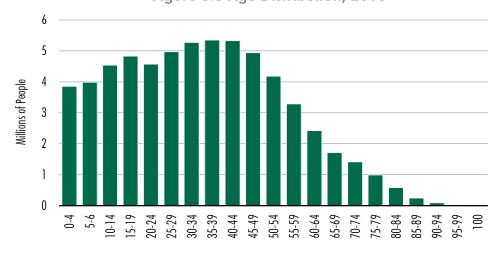
From 2001 to 2012, Thailand's unemployment rate averaged 1.7%. As of February 2012, the BOT reported an unemployment rate of 0.7%.

#### **Population Growth**

Thailand's population growth rate has been declining since 2003. In 2009 and 2011, Thailand saw its lowest population growth at 0.62% and 0.57%, respectively. As of 2011, Thailand has 67.6 million people and despite decreasing growth rates, the NESDB expects Thailand's population to hit 70.6 million people by 2025. Approximately 15% of Thailand's population currently lives in the Bangkok Metropolitan Region. This number is expected to increase to 14 million people by 2025 due to better job opportunities and a better quality of life.

#### **Age Distribution**

According to data from the National Statistics Office (NSO), individuals between 20 and 49 of age account for almost 50% of Thailand's total population. This age range has the highest purchasing power and therefore is known to buy condominiums or properties. The average median male/female age is 34.2 years old.





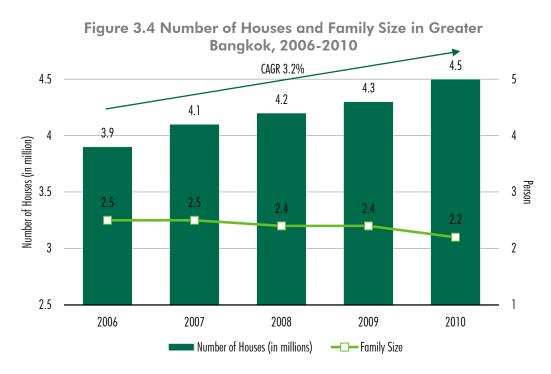
Source: National Statistic Office 2010

#### **Family Size**

In 2011, the average family size for Greater Bangkok was 2.27 people compared to 2.88 people for the whole of Thailand. There has been an increasing trend for smaller sized families. According to the data from the NSO, the average family size in Thailand during the 1960's was as high as 5.6 but declined to 5.2 in the 1980's. In 2000, the average family size in Thailand was 3.9 people but decreased to 3.1 people in 2010. Smaller family sizes and falling birth rates have increased the demand for smaller dwellings.



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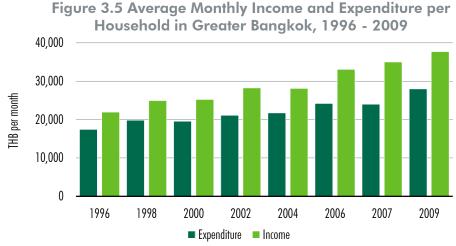


Source: Department of Provincial Administration, Thailand, National Statistics Office



#### WEALTH & CONSUMPTION EXPENDITURE OF THE GREATER **BANGKOK POPULATION**

Average disposable income continues to rise and household expenditure continues to grow. Consumption in the private sector has been steadily increasing due to liquidity fuelled by strong capital inflows, personal flood-related tax allowances for those affected by the flood in 2011 (which lasted until December 2012) and subsidies as well as a more relaxed monetary policy stance. At the same time, consumer sentiment and investor confidence are continually improving.



Source: The Household Socio-Economic Survey 2010, National Statistical Office 2010

Between 1996 and 2009, average monthly income per household grew at a CAGR of 4.2%, outpacing the growth of average monthly expenditure per household which grew at a CAGR of 3.7%. As this illustrates, income, on average, is rising faster than rates of expenditure for people in Greater Bangkok.



#### DYNAMICS OF THE RESIDENTIAL MARKET IN GREATER BANGKOK

#### **Demand Stemming from End-Users**

Demand for one-bedroom condominium units is predominantly driven by Thai purchasers with virtually no foreign buyers. Over the last 2 years, CBRE has seen a shift towards the majority of buyers being actual occupiers rather than buy-to-lease investors or speculators who typically try to resell prior to completion of the building.

#### **Emergence of the Mass Transit Condominium Market**

The other major changes have been the completion of the first mass transit system, popular with the middle-class, and the proposed short and long-term mass transit extension plans. Mass transit systems have had a significant impact on Bangkok residential location patterns and have shaped peoples' decisions on where to live, work and shop.

As land prices, especially those locations next to mass transit stations, and construction costs continue to increase, the challenge for condominium developers is to construct condominiums that are affordable, offer a large enough living area and are situated in attractive locations. The end-users are price sensitive and they are willing to compromise on size to live close to mass transit routes.

#### Demand for Single-Detached Houses and Townhouses Remains Strong

Despite the growth in the condominium market, there is still strong demand for singledetached houses and townhouses. The most attractive areas are those in the east of Bangkok which have good road infrastructure and are located along the MRT Purple Line in North West Bangkok.

There are no speculators or buy-to-rent investors in the low-rise housing market; the market is driven by end-user demand and not distorted by speculative demand.

#### Market Dominated by Established Developers

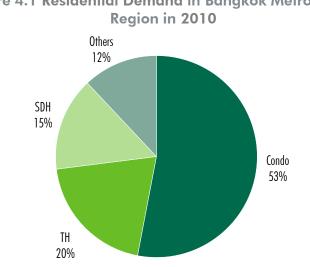
Public listed developers and a limited number of private developers dominate both the condominium and low-rise housing markets. Developments by established developers with a good branding generally sell at a faster rate than those of small developers. In addition, Thai banks appear to have adopted a policy to support the top 10 developers in terms of lower interest rates. The top 10 developers by market capitalization are Land and Houses, Q House, Sansiri, Pruksa, Asian Property, LPN, SC Asset, Supalai, Noble Development and Major Development.

#### **Development of the Property Market**

The performance of the economy and increase in consumer spending power have fed through to the property market which can be seen from the increase in total new supply in the Bangkok Metropolitan Region.

In 2010, the residential demand for condominium units exceeded 50% of all new housing completions.

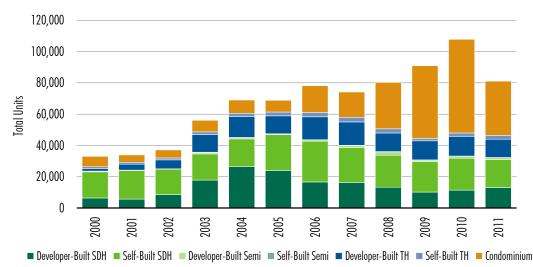




# Figure 4.1 Residential Demand in Bangkok Metropolitan

Note: Others include Twin Houses and Commercial Buildings Source: Real Estate Information Center, 2011

New supply for condominium units peaked in 2010 and slowed significantly in 2011 due to the delay in construction caused by the flood.





Source: Land Department, Real Estate Information Center, CBRE Research and Consulting





#### HOUSING TRANSFERRED IN GREATER BANGKOK

#### **Transferred Properties**

The total number of transferred properties has been increasing since 2007. Despite a small drop in 2011 caused by the floods, CBRE expects growth to resume in 2012.

In Q4 2011, 12,935 condominium units were transferred and 5,612 new condominium units were completed. Not all condominium units are transferred as soon as they are finished. Although CBRE does not have the split between new and second-hand inventory, CBRE is certain that there is a greater number of transfers for second-hand properties in the condominium sector compared to that for houses.

There were 4,524 transfers of both new and previously owned single-detached houses in Q4 2011 in the BMR and there were 5,571 units of developer-built single-detached houses completed in the BMR in Q4 2011. This could mean that there were delays in the transfer of new properties.

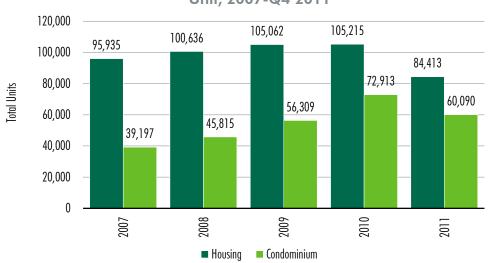


Figure 4.3: Total Transferred Properties in the BMR by Unit, 2007-Q4 2011

Source: Land Department, Real Estate Information Center, CBRE Research and Consulting

#### MORTGAGE LOANS AND HOUSING LENDING MARKET

The lending market has become more competitive with banks offering incentives and marketing schemes to attract homebuyers. Kasikorn Bank, one of Thailand's leading banks, is offering 50-year mortgages, which target lower-income groups (incomes of THB 16,300 per month). With this mortgage package, homebuyers with incomes of THB 50,000 per month can purchase houses priced up to THB 2.9 million. While with the 30-year mortgage package, the same group of customers can buy houses priced at THB 2.7 million.

The development of the lending market helps property buyers afford a residence without paying a large amount of money at one time. The monthly schedule payments with a long time horizon help buyers with low income to pay the mortgage. The competition between commercial banks to offer residential mortgages benefits housing buyers as the mortgage rate will be quite low when compared to the other borrowing activities.



The residential mortgage market in Thailand has experienced strong growth between 2006 and 2010, with new residential loans growing at a CAGR of 9.5%. In 2011, new residential loans decreased slightly by 0.3% primarily as a result of floods which caused a 13.8% Y-o-Y decrease in new residential houses in Q4 2011 alone.

Notwithstanding the above, in 2011, total outstanding residential loans increased by 8.4% Y-o-Y from THB 377,224 million to THB 375,536 million.

In Q1 2011, the Bank of Thailand adjusted the loan to value ratio for condominium lending from 95% to 90%. This move was aimed at preventing excessive speculative buying of condominium investments that would cause a bubble. As the capacity to borrow of the speculative buyers has been reduced, the purchasing power has also been decreased, resulting in lower demand.



Figure 4.4: New Residential Loans in Thailand, 2000 - Q1 2012

Note: As of July 2012, the most updated data available is Q1 2012 Source: Bank of Thailand, Real Estate Information Center



#### THE IMPACT OF NEW INFRASTRUCTURE

#### Mass Transit in Bangkok (Current and Future Plans)

The mass transit system was implemented to help ease the heavy traffic congestion in Bangkok. Fifteen years ago, Bangkok residents preferred to live in single-detached houses or townhouses further away from the Centre of Bangkok compensated by larger living spaces and lower prices. However, the lifestyle of people in Bangkok has changed because of the construction of mass transit networks and the increase in traffic density. The number of registered vehicles in Bangkok has been steadily increasing and, as of 2010, there were approximately 6.4 million registered vehicles resulting in heavier traffic congestion. As a result, Bangkok residents are now choosing to live in the city since it is more convenient and time efficient to travel via BTS, MRT, or ARL. Moreover, travelling by these mass transit networks is far less costly than driving a car. As of Q1 2012, the average number of passengers for the 3 mass transit routes combined is approximately 870,000 per day. Being located next to a mass transit station is becoming an increasingly important factor in determining where people buy or invest in property.

The number of people using the mass transit systems influences the demand for condominiums, explicitly the more passengers that travel on the BTS, the greater the demand for condominiums along BTS routes. Since the BTS has the greatest number of passengers of all the mass transit routes, the demand for properties along the BTS route is higher than demand for properties along the MRT or ARL routes. The ARL is considered to have the least effect on demand and prices of land, due to the limited number of passengers using the network. In the future, CBRE expects to see more property developments launched along the mass transit routes which are presently under construction.

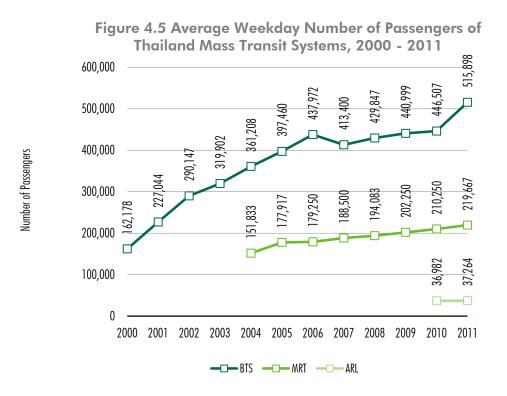
The BTS currently encompasses two routes: the BTS Light Green Line (Morchit – On Nut, also known as the Sukhumvit Line) and the BTS Dark Green Line (National Stadium – Saphan Taksin, also known as the Silom Line). Completed in December 1999, the two routes cover a total of 23.5 kilometers, including most of the city centre and its many commercial, residential and tourist areas. In 2011, the BTS carried an average of 516,000 passengers daily, which was a 16% increase over the same period in the previous year.

In Q1 2012, the average number of passengers on the BTS during the week totalled 586,274 which represents a 20% increase compared to the same period in the previous year. This increase can be attributed to the opening of the extension of the BTS Light Green Line from On Nut to Bearing Station. The MRT's average weekday ridership in Q1 2012 was 247,333, an increase of 16.3% over the same period last year.

In Q1 2012, the ARL's weekday ridership totalled 37,788; the Express Line (non-stop service) to the Suvarnabhumi Airport carried approximately 2,396 passengers per day, while the City Line carried an average of 35,392 passengers per day. The average number of passengers using the Express Line per week-day increased from approximately 1,821 passengers in Q1 2011 to 2,396 passengers in Q1 2012.

According to Ministry of Transport (as of 17 July 2012), the government is trying to speed up the process to further expand the planned mass transit lines, and airport link connecting to Don Muang Airport. Moreover, it is planned that Bangkok will have a mass transit network that covers a total distance of 236 kilometres by 2016 (the current five mass transit routes cover 80 kilometres of distance). The expansion of the mass transit network is





expected to help ease traffic congestion in Bangkok. The convenience of accessibility to the inner city of Bangkok will also affect property developments around BTS and MRT stations.

Note: MRT was opened in July 2004 and ARL was opened in 2010

Source: Bangkok Mass Transit System PLC., Bangkok Metro PLC., CBRE Research and Consulting

There are three suburban mass rapid lines currently under construction. The MRTA is overseeing the MRT Purple Line (Bang Sue – Bang Yai), while the SRT is overseeing the SRT Light Red Line (Bang Sue – Taling Chan). The SRT announced that the SRT Light Red Line has been completed and will open for operations in 2013. According to the MRTA, the MRT Purple Line is 41.4% complete.

Work has started on the extension of the MRT Blue Line (Hualamphong - Bang Khae, Bang Sue - Tha Phra) which is now 12.7% complete (as of Q1 2012). The line is expected to open for service in 2016.



#### Impact of Mass Transit Line on Property Development

There have been many condominium launches along mass transit lines. Due to the greater availability of vacant land along the MRT Purple Line vis-a-vis the SRT Light Red Line, CBRE observed a greater amount of residential projects along the MRT Purple Line.

PROJECT NAME	DEVELOPER	NO. OF UNITS	SIZE (SQ.M.)	PRICE PER SQ.M.	EXPECTED COMPLETION DATE
City Home Rattanathibet	Supalai	679	31 - 72	THB 40,000	Completed
Lumpini Condotown Rattanathibet	LPN	1949	25 - 42	THB 50,000	Completed
The Parkland	Narai Property	591	25 - 28	THB 45,000 - 60,000	Completed
Rich Park @ Bangsorn Station	Rich Place	830	28 - 30	THB 55,000	Q1 2013
Tempo M Tiwanon	Built Land	166	27 - 44	THB 50,000	Q1 2013
UDelight 3	Grand Unity Development	783	25 - 29	THB 54,000 - 60,000	Q2 2013
Regent Home	Regent Green Power	667	30 - 31	THB 25,000	Q2 2013
The Tree Interchange	Pruska	1120	22 - 63	THB 60,000 - 70,000	Q1 2014
Centric Tiwanon Station	SC Asset	1063	32 - 66	THB 55,000 - 65,000	Q1 2014

Table 4.1 Condominium Projects near the MRT Purple Line

Source: CBRE Research and Consulting

Condominium projects being built along the MRT Purple Line, such as D Condo Rattanathibet near Saima Station and Centric Tiwanon Station also target lower to middle income groups. Most condominium projects in these areas offer studio and one-bedroom units with areas between approximately 25-35 sq.m. per unit. Units are priced at approximately THB 40,000-55,000 per sq.m. with total prices under THB 2 million.



CITY	VEHICLE DENSITY (UNIT PER SQ.KM)
Bangkok	4,108
New York	2,453
Los Angeles	2,057
London	1,626
Tokyo	1,602
Berlin	1,472
Singapore	1,328
Hongkong	535
Madrid	505
Shanghai	321

#### Table 4.2 Vehicle Density by City, 2010

Source: Worldatlas, citydata.com

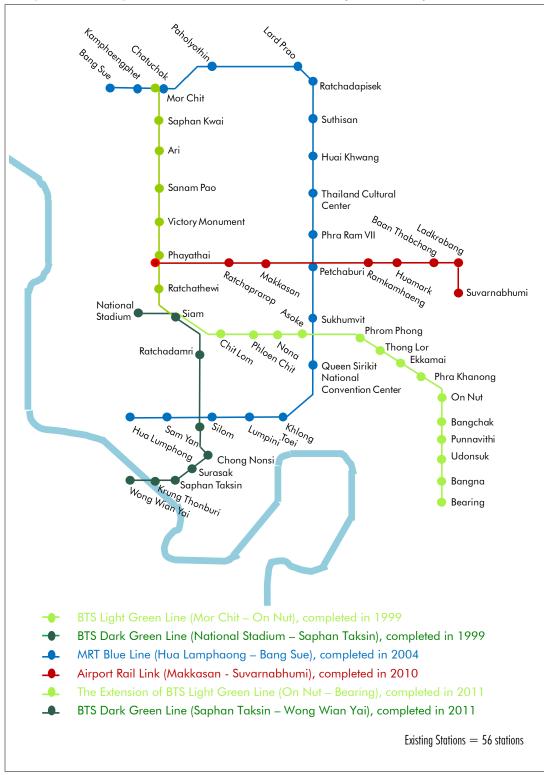
Compared to 9 other cities, in 2010, Bangkok had the highest vehicle density of 4,108 units per sq.km. followed by New York with a vehicle density of 2,453 units per sq.km., almost half that of Bangkok. Shanghai had the highest population of 16.7 million people but had the lowest vehicle density of 321 units per sq.km. The high vehicle density number is the primary cause of heavy traffic congestion within Bangkok, especially in the downtown area. For this reason, Bangkok residents have been trying to move closer to mass transit routes to make travelling more efficient.

Developers are likely to develop more projects along under construction routes and new planned routes. For example, Sansiri's The Base at Chaengwattana is being built near the MRT Pink Line which will run from Nonthaburi to Minburi (construction is expected to start in late 2012). Two stations (Phothinimit and South Ratchadapisek Stations) of the extension of the BTS Dark Green Line are expected to open for operation on December 5, 2012. Completion of the Wutthakat and Bang Wa Stations on the BTS Dark Green Line has been delayed to 2013, pending for an agreement between the Department of Rural Roads and MRTA to construct MRT routes in this area. The completion dates are based on announcements from the Bangkok Metropolitan Administration.

According to the Mass Rapid Transit Authority, the construction bidding process of the MRT Pink Line is expected to be finalized before the end of this year with construction possibly starting next year.

CBRE believes that the Thai government is committed to the expansion of mass transit systems in Bangkok in order to reduce traffic congestion. As the various lines are linked together, expansion of the network will grow passenger traffic across the system. This will make proximity to a mass transit station an increasingly important decision-making factor for residential property purchasers.

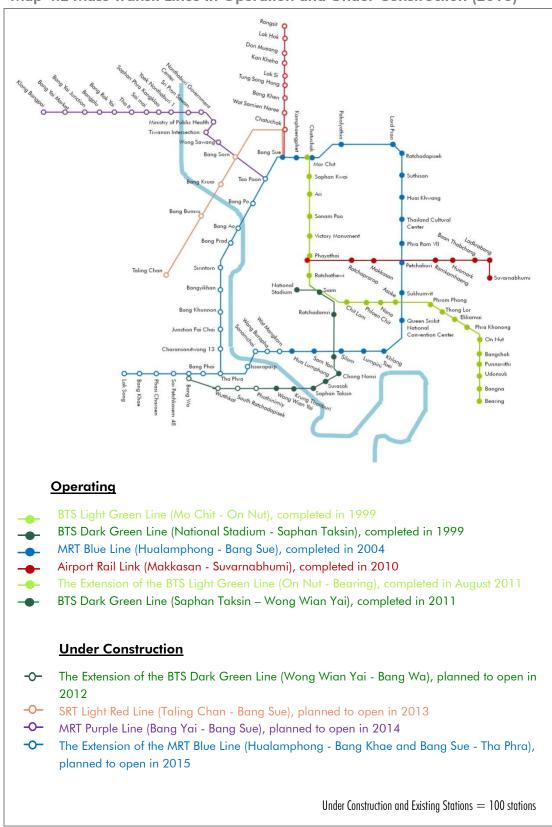




Map 4.1 Existing Mass Transit Lines in the BMR (as of 2011)

Source: CBRE Research and Consulting

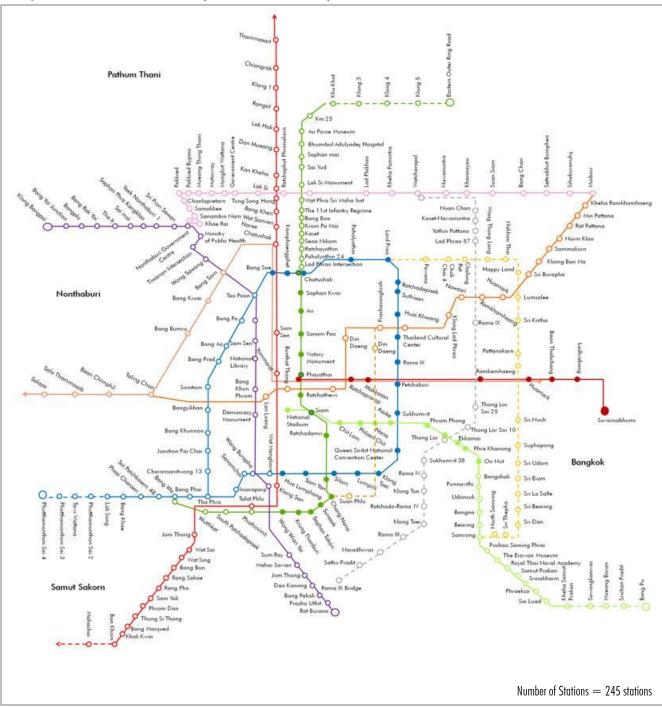




Map 4.2 Mass Transit Lines In Operation and Under Construction (2016)

Source: CBRE Research and Consulting





Map 4.3 Mass Transit Lines (2022 Future Plan)

Source: CBRE Research and Consulting



#### **MARKET OVERVIEW**

The condominium market has changed dramatically in Bangkok over the last 20 years driven by changes in social patterns, growing incomes and infrastructure.

Thais have now adopted condominium living and are increasingly moving away from their parents' homes and purchasing condominiums before they get married.

The inner city mass transit routes such as the BTS skytrain, the MRT and the ARL have been completed meaning that some people do not need to have a car.

The combination of changes in social patterns, new infrastructure and increase in disposable incomes has created a "skytrain" generation that wants to live and work in the city and wants to be as close to a mass transit station as possible.

Historically, before the 1997 Asian Financial Crisis, many Thai buyers bought condominiums as rental investments or as speculators hoping to resell. However, the current development cycle has seen an increase in Thai end-user demand at every level of the condominium market.

The real estate market is mainly dominated by the top players. The largest developer as of 30 July 2012 is Land and Houses, followed by Pruksa Real Estate. Other leading players in the market include Supalai, L.P.N., and Asian Property Development. Most of the largest developers develop both condominium and housing projects.

End-user owner occupancy rates vary from building to building and it is hard to obtain accurate information. Based on CBRE's property management portfolio of mainly larger one to two-bedroom units CBD developments owner occupancy rates ranged between 40-70%.

CBRE has surveyed a sample of smaller one-bedroom city centre developments and found that in many cases owner occupancy levels were above 70% with the balance of the units being available for rent.

In the past, there had been speculative buying in the condominium market with Thai purchasers buying off plan. However, due to the increase in end-user demand, CBRE believes that the level of speculation has decreased since 2010.

CBRE is seeing over 50% of Thai purchasers taking out mortgages for condominiums in the high-end market, CBRE believes that the proportion of purchasers taking out mortgages for condominiums in the mid-range market is higher.

Due to low interest rates for bank deposits, some Thai investors have chosen to invest in condominiums for rental income. There are two rental markets, expatriate and Thais, where expatriate tenants would pay above THB 20,000 per month for downtown projects. On the other hand, Thai tenants would pay below THB 12,000 per month as Thais who could afford more would rather take out mortgages at 90% of loan to value to purchase condominiums.

Foreign purchasers had been active in the upper-end of the condominium market prior to the 2008 Global Financial Crisis. However, there are restrictions on foreign ownership, allowing freehold ownership of up to 49% of the total sellable area of a condominium and requiring that all funds used to purchase a condominium come in from overseas as foreign currency. This effectively means that foreigners are unable to borrow in the domestic market to fund property purchases. Since 2008 there has been a far lower level of foreign purchasers in Bangkok and hence, the one-bedroom condominium market is almost entirely driven by Thai end-users.



Purchasers with a fixed budget need to compromise between the size of their unit and proximity to a mass transit station. It appears that only those developers with projects right next to mass transit stations have been successful in selling one-bedroom units sized below 30 sq.m., apart from very low priced entry-level units. Ananda Development is one of the first large developers to offer one-bedroom units sized below 25 sq.m.

CBRE believes that demand for one-bedroom condominium units located next to mass transit stations will continue to grow but there will be a ceiling on the total affordable price which currently stands at around THB 3 million equating to monthly repayments of around THB 21,000 per month for a 20-year 90% loan to value mortgage.

In addition, proposals by the Bangkok Metropolitan Authority to introduce new regulations regarding the new City Plan, which will restrict development on roads that are less than 16 metres wide, have increased both the demand and asking prices for land along roads wider than 16 metres, especially in locations close to mass transit stations. This proposal has recently been reportedly revoked, but land prices continue to rise.

#### MARKET SHARE OF CONDOMINIUMS BEING BUILT WITHIN 300 METRES OF BTS AND MRT STATIONS

The future supply of listed developer condominium developments, that are less than 300 meters from mass transit stations, currently stands at 10,825 units.

The total existing supply of listed developer condominium developments, that are less than 300 meters from mass transit stations, currently stands at 12,449 units.

Ananda Development has the highest market share of 39% for existing supply and 26% for future supply (as can be seen in Figure 5.1 and Figure 5.2) of condominiums being marketed that are within 300 metres of a mass transit station.

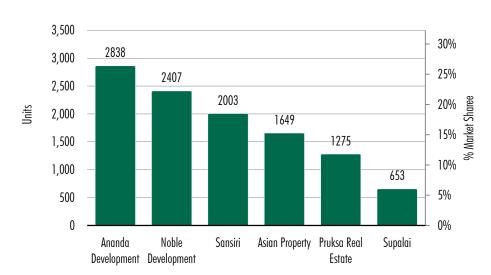


Figure 5.1 Future Supply of Condominium Units within 300 m of Existing BTS and MRT Stations by Listed Developer and Ananda Development, Q2 2012

Source: CBRE Research and Consulting

Total Units: 10,825 units



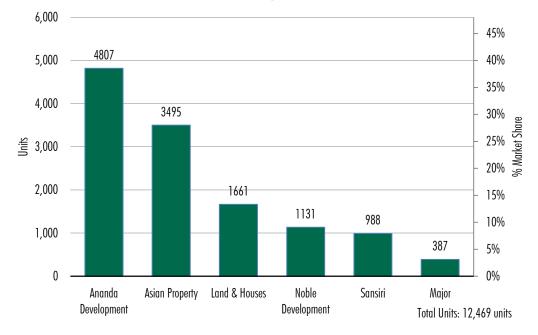


Figure 5.2 Existing Supply for Condominium Units within 300 m for Existing BTS and MRT stations by Listed Developer and Ananda Development Since 2009

#### **CLASSIFICATION OF CONDOMINIUMS**

CBRE classifies units into six categories based on price/sq.m. Classifications are based on the maximum number of units in a project that fall into a category.

Super Luxury	Above THB 180,000/sq.m.
Luxury	THB 130,000 – THB 179,999/sq.m.
High-End	THB 100,000 – THB 129,999/sq.m.
Up Scale	THB 80,000 – THB 99,999/sq.m.
Mid-range	THB 60,000 – THB 79,999/sq.m.
Entry-level	Below THB 60,000/sq.m.

Condominiums that are high-end or above generally demonstrate common characteristics such as:

- Easily accessible locations
- Good and secure neighbourhoods, ensuring privacy of residents
- Good building design, layout and decoration
- Good standard of construction using high-quality materials and specifications
- Comprehensive range of facilities, including swimming pool, gym and/or squash and tennis courts, etc.
- Adequate elevators and efficient maintenance system



Source: CBRE Research and Consulting

- Professional management
- Sufficient car parking

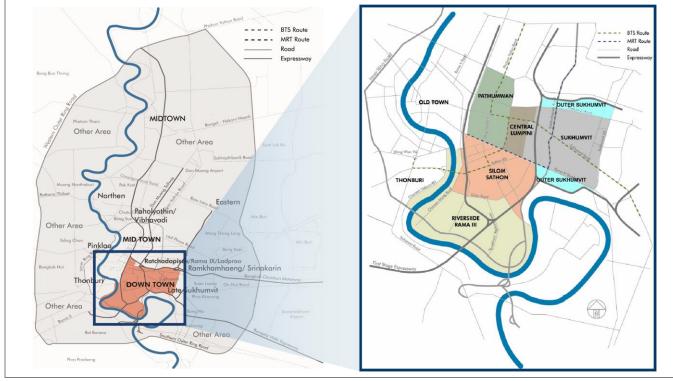
#### **TERMS OF REFERENCE**

Supply:	Current stock
Future Supply:	Units under construction
Newly Launched:	New projects that were opened for sale in this quarter
Newly Completed:	Projects that have finished construction

#### **DEFINITION OF AREAS**

Silom/Sathorn	the area incorporating Silom, Sathorn, Surawong, and Narathiwas-Ratchanakarin Roads (north of Chan Road), as well as sois in between
Central Lumpini	the area incorporating Wireless, Ploenchit, Rajadamri, Chidlom, Langsuan, Sarasin and Ruamrudee Roads, and other sois in between
Sukhumvit	the area incorporating Sukhumvit Road from Soi 1-65 and 2-44, as well as other sois in between
Pathumwan	the area incorporating Ratchaprarop, Phayathai, Sri Ayutthaya and Petchaburi (from Soi 1-37) Roads, as well as other sois in between
Rama III	the area incorporating Narathiwas-Ratchanakarin Roads (south of Chan Road), Charoenkrung and Rama III on the side not adjacent to the river, as well as interlinking sois
Riverside	includes developments on the riverside incorporating Charoenkrung, Charoennakorn, Sampantawong and Chinatown.
Outer Sukhumvit	includes developments on the Petchburi Road from Soi 37-47 and developments on the Rama IV Road that are between the Sukhumvit Road from Soi 2 and Soi 44
Midtown	all other areas of Bangkok lying outside the CBD, including Ratchadapisek, Ladphrao, Ramkhamhaeng, Paholyothin, Thonburi and Sukhumvit Road from Soi 44-76 and 65-115





Map 5.1 Downtown Bangkok Residential Map

Source: CBRE Research and Consulting



#### DOWNTOWN AND MIDTOWN TOTAL SUPPLY

The present condominium development cycle started in 2004 following almost 7 years of inactivity after the Asian Financial Crisis. Initial development was focused on the downtown area with mainly larger units. The market changed significantly following the Global Financial Crisis in 2008. CBRE saw a significant decline in foreign demand for downtown units and developers concentrated on the Thai market, especially on one-bedroom units. The annual amount of recently completed supply started to increase dramatically in 2008.

Since Q3 2010, there have been some fears regarding oversupply and a potential bubble in the condominium market as the annual number of newly completed units approaches the same levels of supply at the peak of the market before the 1997 Financial Crisis. Notwithstanding that, CBRE thinks that the market has changed since then as the buyer base is now end-user dominated versus the speculators and rent-seekers who dominated buyer mix in 1997. Further, the majority of projects are now undertaken by major developers who have better market information. CBRE believes the above has led to a more disciplined development process, which is based on demand instead of speculative buildings.

As of Q1 2012, the total supply in downtown and midtown areas reached approximately 316,959 units. Of this, 93,593 units or 30% are located in the downtown area, while 223,366 units or 70% are located in the midtown area.

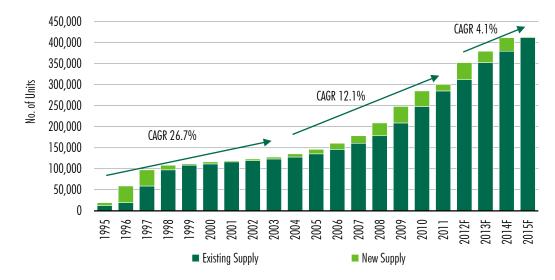


Figure 5.3 Total Downtown and Midtown Condominium Stock and Newly Completed Condominiums, 1995 - 2015F

Source: CBRE Research and Consulting, Land Department Office

The majority of growth during the last several years has been in the midtown area for a number of reasons. First, the completion of the BTS skytrain in 1999 and the completion of the MRT in 2004 have changed people's lifestyles. Second, there has been a greater adoption of condominiums versus low-rise housing by Thai buyers. Third, there has been an increasing trend of the younger generation moving out of the family home even before marriage.



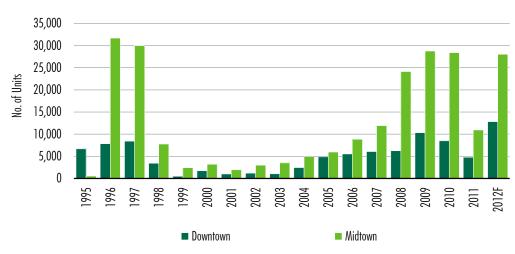


Figure 5.4 Newly Completed Condominiums in Downtown and Midtown, 1995 - 2012F

Source: CBRE Research and Consulting, Land Department Office

According to the CBRE database, since 2009 the existing supply and known future supply of listed developers and Ananda Development totalled 32,877 units. Developments within 300 meters of mass transit stations have the highest take-up rate followed by 301-600 meters and 601-900 meters, respectively.

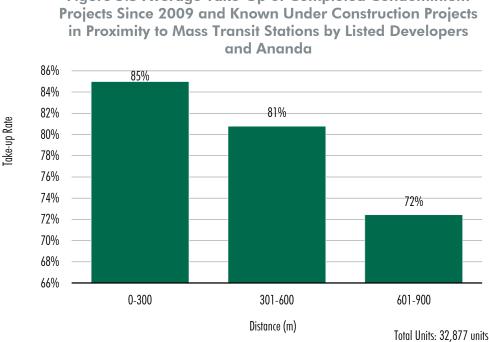


Figure 5.5 Average Take-Up of Completed Condominium

Source: Based on publicly available information from annual registration forms (56-1, as of Dec 2011)



#### DOWNTOWN CONDOMINIUM MARKET

#### **Total Supply**

In Q1 2012, the existing supply in downtown Bangkok reached 93,593 units, up from 92,562 units in Q4 2011. This represented an increase of 6.1% Y-o-Y and 1.1% Q-o-Q. There were 1,031 units completed in Q1 2012. Another 11,715 units are scheduled to be completed by the end of 2012 which will raise the total downtown condominium stock to 105,308 units, an increase of 13.8% Y-o-Y. The total number of units due to be completed in the downtown area from Q2 2012 to 2015 is 24,786 units, representing a 26% increase in supply.

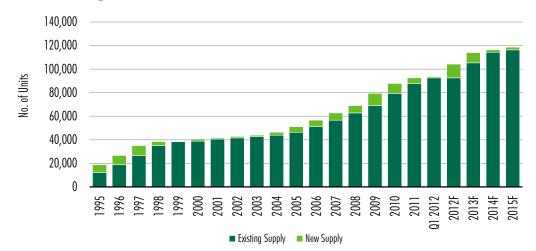


Figure 5.6 Downtown Condominium Stock, 1995 - 2015F

Source: CBRE Research and Consulting, Land Department Office

A large portion of the supply in the downtown area is located in the Sukhumvit area which is the established residential area for both Thais and expatriates. The popularity of this area is supported by the mass transit system which runs through the main Sukhumvit road and the wide variety of retail outlets. The Sukhumvit area accounts for 31% of the total downtown supply, followed by Silom/Sathorn (16%), Riverside (16%), Rama III (13%), Pathumwan (11%), Central Lumpini (6%), and Outer Sukhumvit (7%).

#### **Newly Completed Supply**

Six condominium projects, comprising of 1,031 units, were completed in Q1 2012. Three projects including the Bright 24, Pearl Residences and XVI The Sixteenth Condominium are located in the Sukhumvit area. Other newly completed developments include the Socio located in the Central Lumpini area, the Focus on Saladeang located in the Silom/Sathorn area, and the Ideo Verve Ratchaprarop located in the Phayathai area.





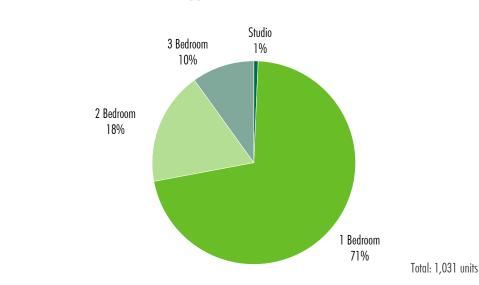
Table 5.1 Newly Completed Condominium Projects in Downtown Area, Q1 2012

PROJECT NAME	DEVELOPER	LOCATION	NO. OF STOREYS	TOTAL NO. OF UNITS	UNITS/TYPE	LAUNCH DATE
Silom/Sathorn						
Forus on Saladoeng	Focus Development and Construction	Saladaeng Road	8	62	55/1br 7/2br	Q3 2010
Central Lumpini The Socio	Duilding Descets Co. 1td	Ruamrudee	8	67	67/1br	Q2 2010
	Building Property Co., Ltd	Kuunnuuee	0	07	67/ IUI	Q2 2010
ukhumvit	40 × 1, 0 ± 16	0.11 1:04	<u>0</u> (	000	0/71	04.0000
Bright 24	Albright Holdings	Sukhumvit 24	36	292	96/1br 96/2br 96/3br 4/ph	Q4 2009
'earl Residences	Pearl Property Development	Sukhumvit 24	8	78	46/1br	Q3 2011
					26/2br 6/3br	
Sukhumvit All The Circle and Circ	Alician Assol	Sukhumvit 16	0	76	7/ stu	2010
WI The Sixteenth Condominium	Alpine Asset	JUNIUIIIIII I O	8	70	7/ siu 62/ 1br 7/ 2br	2010
Phayathai		D I	0.		407 21	04 0000
ideo Verve Ratchaprarop	Ananda Development	Ratchaprarop	34	447	407/1br 49/2br	Q4 2008

Source: CBRE Research and Consulting



In Q1 2012, 1,031 units of the newly completed condominiums in the downtown area were one-bedroom units, followed by two-bedroom units which accounted for 18%. Three-bedroom units accounted for 10% while studio units accounted for only 1%.



#### Figure 5.7 Newly Completed Units in Downtown by Unit Type, Q1 2012

#### **Future Supply**

Condominium developers started off strongly in Q1 2012 with 2,679 newly launched units compared to only 1,409 units in the same period last year. Smaller unlisted condominium developers remain cautious and the market continues to be dominated by the larger publicly listed developers such as Pruksa, Land and Houses, Supalai, and L.P.N.

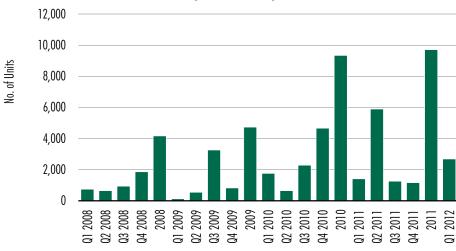


Figure 5.8 Newly Launched Units in the Downtown Area, Q1 2008 - Q1 2012

Note: Based on known future projects

Source: CBRE Research and Consulting



Source: CBRE Research and Consulting

Based on our current projections for the downtown area, CBRE expects that 24,786 units will be completed by the end of 2015. In the downtown area, Sukhumvit and Riverside will account for 22% of the total future supply.

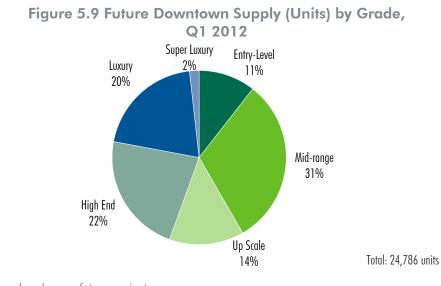
LOCATION		ESTIMATED N	IO. OF UNITS		TOTAL	%SHARE
LOCATION	2012F	2013F	2014F	2015F	(2012-2015F)	
Silom/Sathorn	1,833	1,428	-	194	3,455	14%
Central Lumpini	64	236	-	1,442	1,742	7%
Sukhumvit	3,477	2,073	-	-	5,550	22%
Pathumwan	609	1,088	-	-	1,697	7%
Rama III	-	1,685	-	-	1,685	7%
Riverside	3,211	906	1,427	-	5,544	22%
Outer Sukhumvit	2,521	1,297	645	650	5,113	21%
TOTAL	11,715	8,713	2,072	2,286	24,786	100%

 Table 5.2 Future Supply in Downtown Area by Location, Q1 2012

Note: Based on known future projects

Source: CBRE Research and Consulting

Mid-range condominiums account for 31% of all future units in the downtown area, while high-end, luxury, and up scale condominiums account for 22%, 20% and 14% of all future units downtown, respectively. Entry-level and super luxury condominiums each account for only 11% and 2% of all future units in the downtown area, respectively.

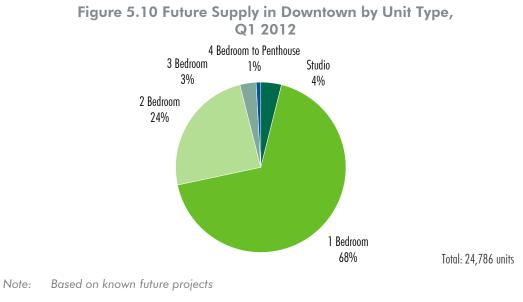


Note: Based on known future projects

Source: CBRE Research and Consulting

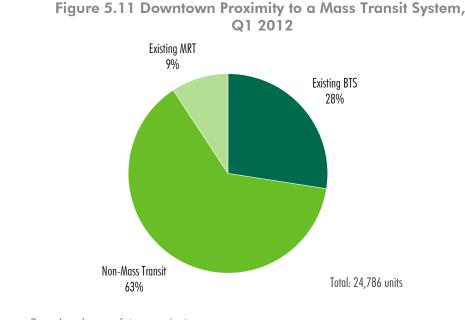
The vast majority of future supply in the downtown area will be one-bedroom units which total 16,789 units or 68% of the future supply. This will be followed by two-bedroom units which account for 24% of the future units.





Source: CBRE Research and Consulting

Sixty-three percent of all future condominium projects in the downtown area are not located within 500 metres of the mass transit systems (what CBRE has classified in the graph below as "non-mass transit"). This is largely due to limited land availability and higher land prices, particularly along the BTS routes.



Note: Based on known future projects

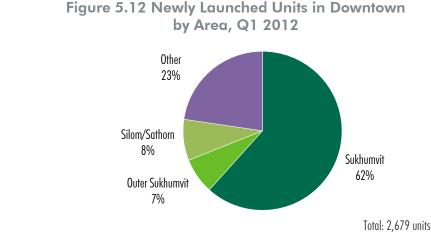
Source: CBRE Research and Consulting

#### **Newly Launched Projects**

Eight projects (2,679 units) were launched in Q1 2012 in the downtown area. Five projects including the Aspire Sukhumvit 48, the Head Quarter (HQ) Thonglor soi 8, Sari Sukhumvit 64, Hyde Sukhumvit 13, and Downtown 49 Sukhumvit 49/12 are located in Sukhumvit. The Capital Ekkamai-Thonglor is the newest development on Petchburi road located in the outer

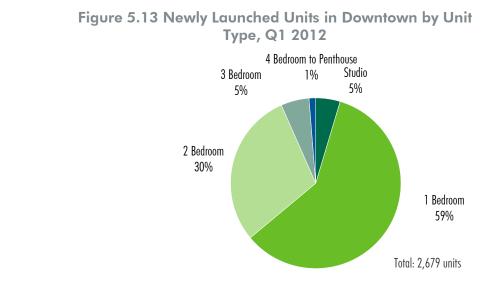


Sukhumvit area. Chamjuree Square Residence was also re-launched with smaller units in the same building located in Silom/Sathorn area. Lastly, Ananda Development launched another condominium development, Ideo Mobi Phayathai, in Pathumwan area.



#### Source: CBRE Research and Consulting

Fifty-nine percent of the units in newly launched projects were one-bedroom, followed by two-bedroom units accounting for 30%. The one-bedroom units with sizes ranging from 25-56 sq.m. totalled 1,589 units. Two-bedroom, three-bedroom, penthouse and other unit types made up only 36% of the units in newly launched developments.



Note: Based on known future projects Source: CBRE Research and Consulting



able 5.3 Newly L PROJECT NAME	DEVELOPER	LOCATION	NO. OF	TOTAL NO.	TYPE	UNIT	UNIT SIZE	ASKING PRICE	PAYMENT TERMS
khumvit pire Sukhumvit 48	Asian Property	Sukhumvit 48	25,30	837	1-br	660	25-38	68,000	Reservation THB 10,000
	Азий нарону		23,30	007	2-br	177	54-64	00,000	Contract THB 30,000 Down Payment 15% Transfer 85%
ad Quarter	Sansiri	Thonglor Soi 8	36	197	1-br	115	41-56	130,000	Reservation THB 100,000-150,00
-					2-br	77	72-99		Contract 3%
					Duplex PH	2 3	76-81 182-263		Down Payment 12% Transfer 88%
ri	Sansiri	Sukhumvit 64	8,8	192	1-br	157	34-48	85,000	Reservation THB 20,000-40,000
<b>Ma</b> h					2-br	35	55-77		Contract THB 50,000-80,000 Down Payment 5% Transfer 95%
de Sukhumvit	Grand Asset Hotel and Property	Siukhumvit 13	40	455	1-br	227	31-76	145,000	Reservation THB 50,000-200,000
ormerly the Regent Residences)					2-br	161	72-116		Contract 5%
EM					3-br Duplex	64 8	97-183 151-246		Down Payment 15% Transfer 85%
					PH	4	323		
wntown 49	Maryland	Sukhumvit 49/12	8,8	135	1-br 2-br	36 94	34 62	95,000	Contract 5% Down Payment 15%
thumwon					PH	5	138		Transfer 80%
eo Mobi Phayathai	Ananda Development	Phayathai	24	330	stu	124	21	135,000	Reservation THB 25,000
					1-br 2-br Duplex	100 56 36	29-30 41-51 41-61		Contract 3% Down Payment 7% Transfer 90%
tchburi									
e Capital Ekkamai-Thonglor	KPN	Petchburi	27	281	1-br 2-br PH	182 94 5	30-48 54-77 92-175	90,500	Reservation THB 20,000 Contract THB 40,000-60,000 Down Payment 15% Transfer 85%
PROJECT NAME	DEVELOPER	LOCATION	NO. OF	TOTAL NO.	TYPE	UNIT	UNIT SIZE	ASKING PRICE	PAYMENT TERMS
om/Sathorn 1mjuree Square Residence*	Chulalongkorn University	Samyan	24	266	1-br	112	43	67,500	Reservation THB 100,000
	eronalongkon onroisity	Junyun	21	200	2-br 4-br	56 18	80-100 223-244	07,500	Contract THB 1,000,000
a contained and a second									

Note: \*Chamjuree Square Residence is a 30 year leasehold project



#### Occupancy

CBRE has measured occupancy levels of completed projects in the downtown area to use as an indicator of actual demand.

Table 5.4 Occupancy Rate of Downtown Freehold Units by Area, Q4 2011-Q1 2012

	Q4	2011	Q1	2012	CHANGE RATE IN
LOCATION	UNITS OCCUPIED	OCCUPANCY RATE	UNITS OCCUPIED	OCCUPANCY RATE	OCCUPANCY (Q-O-Q)
Silom/Sathon	10,706	71.2%	11,207	74.3%	3.0%
Central Lumpini	4,542	77.7%	4,594	77.7%	0.0%
Sukhumvit	20,214	70.9%	20,788	71.8%	0.9%
Pathumwan	7,861	81.1%	8,310	81.9%	0.8%
Riverside	10,306	70.7%	10,702	73.4%	2.7%
Rama III	9,175	72.9%	9,694	77.1%	4.1%
Outer Sukhumvit	3,016	47.8%	3,253	51.5%	3.8%
TOTAL	65,820	72.4%	68,548	73.2%	<b>0.9</b> %

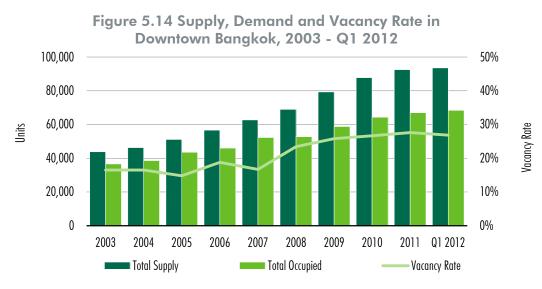
Note: These take-up figures were obtained by making phone calls to the juristic person of buildings in the specified areas. Take-up figures are an approximation based on a basket of properties in each area.

#### Source: CBRE Research and Consulting

The total number of units occupied by owners or tenants increased to 68,548 in Q1 2012 from 65,820 in Q4 2011. This effectively increased the average occupancy rate to 73.2% from 72.4% in the previous quarter. It has remained at this level for the past 3 years but CBRE expects rapid increase in condominium supply to put further downward pressure on occupancy in the future.

The Pathumwan area recorded the highest occupancy rate at 81.9%, followed by Central Lumpini (77.7%), Rama 3 (77.1%), Silom/Sathon (74.3%), and Sukhumvit (71.8%). Condominiums located in the Outer Sukhumvit area achieved the lowest average occupancy due to completion of two new developments, My Resort Bangkok and the Circle. The average occupancy of condominiums in the main Sukhumvit area remains depressed as more supply enters the market. Six new projects were completed in the area with a total of 1,031 units, of which 43% of supply is located in the Sukhumvit area.





Source: CBRE Research and Consulting

The number of new condominium completions has had a significant impact on the average occupancy rate because it takes approximately 12-18 months from the completion of the building to the time when the units are actually occupied. New supply of condominium units is expected to rise due to the large number of new project launches over the past few years. This will add pressure to the occupancy rates of older buildings since tenants prefer to lease units in new buildings.

# Table 5.5 Condominium Occupancy Levels by Sub-market and Grade, Q12012

2012							
			0	CCUPANCY RAT	Έ		
LOCATION	SUPER LUXURY	LUXURY	HIGH END	UP SCALE	MID- RANGE	ENTRY- LEVEL	GRAND TOTAL
Silom/Sathorn	29.5%	48.6%	62.0%	72.0%	86.6%	79.3%	74.3%
Central Lumpini	70.6%	69.7%	74.6%	74.7%	79.7%	89.5%	77.7%
Sukhumvit	-	30.6%	67.5%	70.0%	73.8%	80.5%	71.8%
Pathumwan	-	-	53.3%	77.0%	90.1%	82.8%	81.9%
Riverside	-	-	35.0%	63.0%	87.5%	78.8%	73.4%
Rama III	-	-	30.0%	-	98.0%	76.4%	77.1%
Other Sukhumvit	-	-	10.0%	-	54.1%	76.6%	51.5%
TOTAL	4 <b>9</b> %	44.2%	<b>56.8</b> %	70.7%	77.5%	<b>79.1%</b>	73.2%

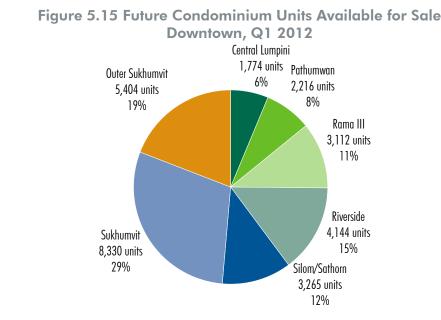
Note: High end occupancy for Outer Sukhumvit consist of only one project

Source: CBRE Research and Consulting

#### Sales of Future Downtown Projects

As of Q1 2012, 62.8% of future units being marketed in downtown Bangkok had already been sold and 10,504 units were still available. This was a decline from 70.2% in Q4 2011 and 67.8% in Q3 2011





Source: CBRE Research and Consulting

Condominium developments in the Pathumwan area achieved the highest sales performance with a take-up rate of 69.4% as there have been few new off-plan units available in the area. The Outer Sukhumvit area recently gained popularity with many listed developers launching new condominium developments close to the mass transit station (MRT Petchburi) at prices lower than those in the Sukhumvit area. Many project launches in the area received positive responses from buyers which pushed up the average achieved sales performance to 68.8%. This was closely followed by the Riverside area (67.2%) which has seen very little development activity over the past few years. The Sukhumvit and Silom/Sathorn areas recorded average achieved sale performances of 63% and 62.3% respectively, while Central Lumpini remained the area with the lowest sales performance due to high prices.

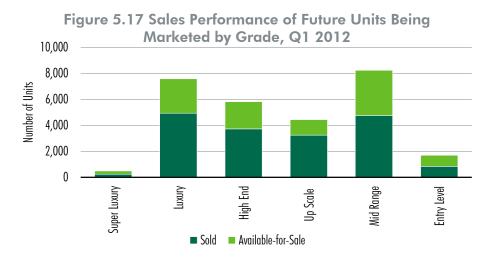


#### Figure 5.16 Sales Performance of Future Units Being Marketed by Area, Q1 2012

Source: CBRE Research and Consulting



The best selling condominium grades are up scale with 73% of the total units being sold, followed by luxury (65.1%), high-end (64%), mid-range (57.9%), entry-level (50%), and super luxury (47.8%). It should be noted that there was only one future entry-level project in the downtown area.



Source: CBRE Research and Consulting

#### Table 5.6 Sales Performance of Future Projects Downtown, Q1 2012

AREA	NC AVAILABLE	). OF PROJECTS SOLD OUT	TOTAL	TOTAL UNITS	% SOLD	REMAINING UNITS AVAILABLE
Central Lumpini	3	0	3	1,774	40.3%	1,059
Pathumwan	5	2	7	2,216	69.4%	677
Rama III	3	0	3	3,112	54.8%	1,406
Riverside	3	0	3	4,144	67.2%	1,358
Silom/Sathorn	10	0	10	3,265	62.3%	1,231
Sukhumvit	36	5	41	8,330	63.0%	3,085
Outer Sukhumvit	7	2	9	5,404	68.8%	1,688
GRAND TOTAL	67	9	76	28,245	<b>62.8</b> %	10,504

Note: Sales figures are provided by developers. This table does not include projects which are on hold

Source: CBRE Research and Consulting



#### Asking Price of Future Downtown Projects

Table 5.7 Average Asking Price of Future High-End Units and Above (Off Plan), 2003-Q1 2012

YEAR	SILOM/ SATHORN	CENTRAL LUMPINI	SUKHUMVIT	OUTER SUKHUMVIT	PATHUMWAN	RIVERSIDE	AVERAGE PRICE (THB/SQ.M.)	% CHANGE Y-O-Y
2003	76,650	104,583	72,645	-	-	-	84,626	17.3%
2004	91,250	104,750	83,733	-	-	78,000	89,433	5.7%
2005	103,006	117,500	95,982	-	-	85,943	100,608	12.5%
2006	124,833	120,000	106,150	-	-	90,000	110,246	9.6%
2007	184,000	142,250	131,000	-	-	121,167	136,363	23.7%
2008	228,333	210,901	141,923	-	-	131,000	155,801	14.3%
2009	137,854	154,364	121,432	-	-	111,357	131,252	-15.8%
2010	157,778	183,750	133,550	-	-	150,000	156,270	19.1%
2011	151,886	166,875	132,271	122,083	116,898	150,000	143,564	-8.1%
Q1 2012	147,857	185,000	133,138	123,333	131,667	150,000	145,166	-1.8%

Source: CBRE Research and Consulting

The average asking price for condominium projects under construction (high-end and above) in downtown Bangkok declined by 1.8% Y-o-Y to THB 145,166 per sq.m. in Q1 2012 from THB 147,752 per sq.m. in the same period last year. The average asking price is calculated from all the projects under construction, where the number of projects under construction in less prime locations in the CBD with lower prices has increased. This has brought down the average price of all units under construction.

The Central Lumpini area recorded the highest average asking price of THB 185,000 per sq.m., followed by Riverside (THB 150,000 per sq.m.), Silom/Sathorn (THB 147,857 per sq.m.), Sukhumvit (THB 133,138 per sq.m.), Pathumwan (THB 131,667 per sq.m.), and Outer Sukhumvit (THB 123,333 per sq.m.). The average asking price in the Central Lumpini area is expected to rise as developable land plots become increasingly scarce.

The asking price for off plan projects in Nana area between Sukhumvit soi 1-21 is between THB 110,000 – 140,000 per sq.m., depending on the proximity to mass transit station and quality of the project. In addition, the asking price for off plan projects on the main road of Phaya Thai ranges from THB 100,000 – 135,000 per sq.m. Prices in prime locations continue to rise. CBRE expects to see steady increase in land and construction costs going forward; consequently new projects will have to be launched at higher prices.

#### **Re-sale Price of Existing Downtown Projects**

The average achieved re-sale price of completed condominium projects (up scale and above) increased by 12.8% Y-o-Y from THB 124,895 per sq.m. in Q1 2011 to THB 140,851 per sq.m. in Q1 2012. Buildings that are in the best location and have been well maintained achieved record re-sale prices. It should be noted that the high increase in the average price of 18.7% Y-o-Y in the Silom/Sathorn area was the inclusion of the Sukhothai Residences which has just been completed. Even without this development, the average re-sale price in the area increased by 8.9% Y-o-Y. Condominiums in the Central Lumpini area achieved the highest re-sale price level of THB 155,311 per sq.m., representing an increase of 6.7% Y-o-Y.





Table 5.8 Average Re-sale Prices of Completed Freehold Up Scale Units and Above, 2000 - Q1 2012

				-	
YEAR	SILOM/SATHORN	FREEHOLD CENTRAL LUMPINI	SUKHUMVIT	AVERAGE PRICE (THB/SQ.M.)	% CHANGE Y-O-Y
2000	51,604	69,111	43,767	54,827	N/A
2001	55,354	77,250	47,402	60,002	9.4%
2002	60,893	78,479	54,600	64,657	7.8%
2003	68,208	105,201	60,788	78,065	20.7%
2004	71,094	107,633	74,970	84,566	8.3%
2005	73,383	109,784	74,789	85,985	1.7%
2006	76,730	108,742	87,469	90,980	5.8%
2007	84,232	106,651	94,665	95,182	4.6%
2008	94,798	115,550	101,355	103,901	9.2%
2009	112,142	131,503	101,268	114,971	10.7%
2010	113,556	146,333	113,068	124,319	8.1%
2011	121,151	148,299	119,826	129,759	4.4%
Q1 2012	137,187	155,311	130,054	140,851	12.8%

Source: CBRE Research and Consulting



#### MIDTOWN CONDOMINIUM MARKET

#### **Total Supply**

CBRE has been able to obtain the total number of condominium units completed in the midtown area since 1995 but do not have numbers of condominiums completed before that date. CBRE believes that there was only limited number of midtown condominiums completed before 1995.

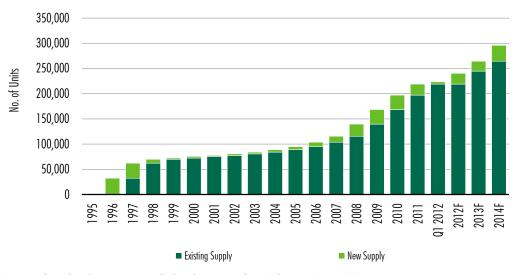


Figure 5.18 Midtown Condominium Stock, 1995 - 2014F

Note: Our database covers all developments for midtown since 1995.

Source: CBRE Research and Consulting, Land Department Office

In the midtown area, approximately 223,366 condominiums were completed from 1995 to Q1 2012. Midtown is divided into 9 areas, Ramkhamhaeng/Srinakarin with 18% of existing supply, Ratchadaphisek/Rama IX/Ladprao with 17%, Other Area with 17%, Paholyothin/Vibhavadi with 10%, Outer Sukhumvit with 9%, Northern with 9%, Thonburi with 8%, Eastern with 6% and Pinklao with 6%.

#### Newly Completed Supply

Seventeen condominium projects, comprising 4,430 units, were completed in Q1 2012. The outer Sukhumvit and Ratchadaisek/Rama IX/Ladprao areas saw the largest increase in supply of 695 units and 1,131 units, respectively.

Table 5.9 List of New	y Completed Condominium i	in Midtown, Q1 2012
-----------------------	---------------------------	---------------------

AREA	TOTAL UNITS	DEVELOPERS	DATE LAUNCHED
Eastern			
D Condo — On Nut/Suvarnabhumi	916	Sansiri	2010 Q1
Outer Sukhumvit			
Casa City Condo - Sukhumvit 97	218	Quality House	2011 Q1
The link Sukhumvit 64	122	Tararom Estate	2010 Q3
The Next (The Garden Mix)	138	KD Asset and Development	2011 QI





AREA	TOTAL UNITS	DEVELOPERS	DATE LAUNCHED
Vinn	68	Vinn Residence and Cube Development	2010 Q4
Whizdom The Exclusive	79	Magnolia Quality	2010 Q3
Magnet Condo	70	Kongsupol	2011 Q3
Northern			
Max Condominium Ngamwongwan	144	Inspired Property	2008
Paholyothin			
The Tempo	79	Built Land	2010 Q3
Ramkhamhaeng/ Srinakarin			
Lumpini Condotown Nida-Sereethai	593	LPN	2011 Q1
Ratchadapisek/Rama IX/Ladprao			
Ables	154	Day Gain Group	2011 Q1
Astra Condominium	56	Starz Land	2010 Q4
Life @ Ladprao 18	456	Asian Property	2009 Q3
Metrosky Ratchada	386	Property Perfect	2008 Q4
Chateau In Town Ratchada 20	79	Prayapanit Property	2011 Q1
Thonburi			
Bangkok Horizon	596	CMC Group	2011 Q1
Other Areas			
The Center Condominium	276	Wangthong Group	2011

Source: CBRE Research and Consulting

Over 56% of the newly completed condominium units in the midtown area were onebedroom units, followed by studio units which accounted for 31.5%. Two-bedroom and three-bedroom units accounted for 11.6%, and 0.5%, respectively.

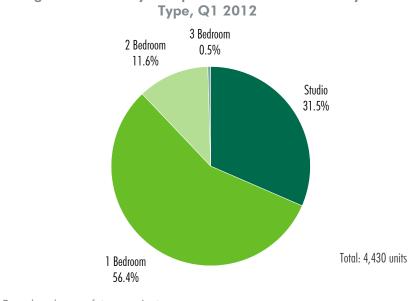


Figure 5.19 Newly Completed Units in Midtown by Unit

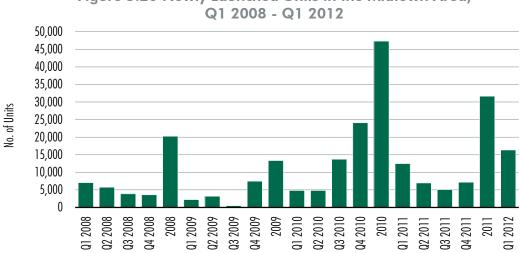
Note: Based on known future projects

Source: CBRE Research and Consulting, Land Department Office



#### **Future Supply**

The number of newly launched units jumped from 7,148 units in Q2 2011 to 16,350 units in Q1 2012. This accounted for more than half of the newly launched units in the whole year of 2011. Listed developers continue to expand aggressively into midtown areas while smaller developer remained cautious.





The Northern area and Outer Sukhumvit area remain popular locations for a condominium development in the midtown areas with a large portion of the future supply being located there. Development growth in the Northern area was primarily due to the relocation of government offices and expansion of mass transit systems with the construction of the MRT Purple Line. The Outer Sukhumvit area also benefited from the expansion of the mass transit system through the BTS On Nut-Bearing extension.

CBRE expects 72,408 midtown units to be completed by the end of 2014.

#### Table 5.10 Future Supply in the Midtown Area by Location, Q1 2012

LOCATION	ESTIM	ATED NO. OF	UNITS	TOTAL	%SHARE	
LOCATION	2012F	2013F	2014F	(2012F-2014F)	70JNAKE	
Ratchadaphisek/Rama IX/Ladprao	1,350	1,963	6,487	9,800	14%	
Eastern	1,159	1,123	3,625	5,907	8%	
Outer Sukhumvit	4,439	3,326	5,612	13,377	18%	
Northern	5,412	4,076	8,601	18,089	25%	
Other Area	1,118	1,110	1,406	3,634	5%	
Paholyothin/Vibhavadi	3,636	3,593	2,248	9,477	13%	
Pinklao	1,184	445	1,525	3,154	4%	
Ramkhamhaeng/Srinakarin	1,935	2,502	1,649	6,086	8%	
Thonburi	1,082	1,488	314	2,884	4%	
TOTAL	21,315	19,626	31,467	72,408	100%	

Note: Based on known future projects

Source: CBRE Research and Consulting



Source: CBRE Research and Consulting

Most of the future units in midtown will be entry-level (55%), followed by mid-range (33%), up scale (10%), and high-end (2%).

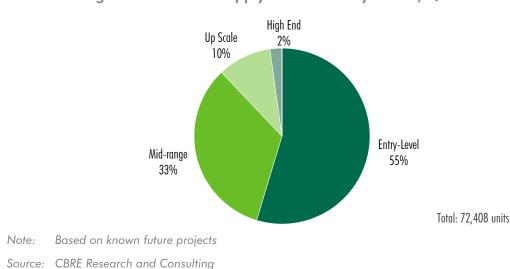


Figure 5.21 Future Supply in Midtown by Grade, Q1 2012

Approximately 34,110 of the condominium units under construction in the midtown area are located in a non-mass transit area.

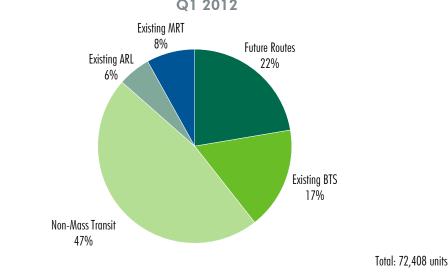


Figure 5.22 Midtown Proximity to a Mass Transit System, Q1 2012

Note: Based on known future projects

500m from a condominium's main entrance to the closest mass transit station

Source: CBRE Research and Consulting

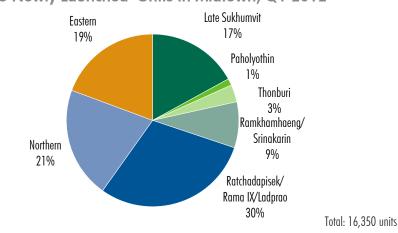
CBRE expects to see more supply in areas that are next to the mass transit systems since accessibility is a crucial factor for many buyers. This was the predominant trend starting in Q1 2012, the midtown area with many developers launching projects near either the BTS or the MRT. However, not all condominiums located near the mass transit system were successful. CBRE has not seen this happen with the ARL since passenger numbers are much lower than that of the BTS and MRT.



#### **Newly Launched Projects**

Twenty-two projects (16,350 units) were launched in Q1 2012 in the midtown area. The largest projects launched (in terms of units) include Lumpini Mega City Bangna Phase 2 condominium with 2,924 units, D Condo Rattanathibet with 1,325 units and Supalai Wellington with 1,002 units.

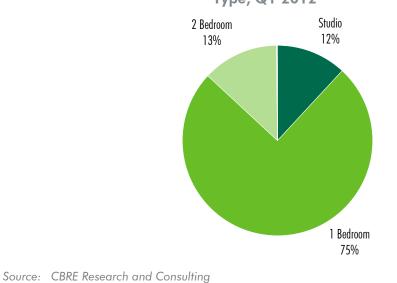
Thirty percent of the units in newly launched projects are located in Ratchadapisek/Rama IX/Ladprao, followed by Northern Area (21%), Eastern Area (19%), Outer Sukhumvit (17%), and Ramkhamhaeng/Srinakarin (9%).



#### Figure 5.23 Newly Launched Units in Midtown, Q1 2012



Almost 75% of the units in newly launched projects in the midtown area were one-bedroom units, followed by two-bedroom units at 13%. The one-bedroom units with size ranging from 23-47 sq.m. accounted for 12,264 units. Two-bedroom units accounted for 13% of the newly launched units or 2,111 units.



#### Figure 5.24 Newly Launched Units in Midtown by Unit Type, Q1 2012

Total: 16,350 units





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#### SALES PERFORMANCE OF TOP 15 DOWNTOWN AND MIDTOWN CONDOMINIUM LISTED DEVELOPERS

CBRE surveyed the top 15 publicly listed condominium developers and included the information provided by Ananda Development. Only Pruksa Real Estate PCL. did not provide us with building by building breakdon. CBRE obtained the sales performance information from quarterly presentations and annual registration statements collected by the Securities and Exchange Commission (SEC).

#### Sales in Completed Developments by Selected Developers

The sales record provided by listed developers indicates steady progress to clear existing unsold inventory in both downtown and midtown areas. Approximately 91% of the units in completed buildings have been sold leaving 4,042 units for sale in both the downtown and midtown areas. Of the 4,042 units, only 1,003 units are located in the downtown area indicating that there is limited unsold inventory. However, condominiums located in the midtown area have been able to sell units at a faster rate. There are currently 49,615 completed condominium units of which 45,572 have already been sold.



PROJECT NAME	DEVELOPER	LOCATION	LAUNCH DATE	TOTAL NO. OF UNITS	NO. OF STOREYS	TYPE	UNIT SIZE (SQ.M.)	ASKING PRI THB PER SQ.M.
ite Sukhumvit eo Mobi Sukhumvit 81	Ananda Development	Sukhumvit 81	Feb-12	935	23,25	stu 1-br 2-br Duplex	21-24 30 43-52 41-61	100,000 130,000
ytting Hill	Origin Property	Sukhumvit 107	Jan-12	157	8	1-br	26-43	65,500
orthern oss Point condominium	Rojtaj Development	Taopoon	Jan-12	246	26	1-br 2-br	26-40 52-67	start 90,000
ie Tree Interchange condominium ower B)	Pruksa Real Estate	Bangsue	Mar-12	650	40	stu 1-br 2-br	22-29.5 35 58-63	60,000 72,000
sholyothin ateau in Town Paholyothin 32	СМС	Paholyothin 32	Feb-12	207	8	1-br	30	start 60,00
imkhamhaeng/ Srinakarin e Base Rama 9- Ramkhamhaeng	Sansiri	Rama 9	Feb-12	922	35	stu 1-br 2-br	25-27 28-32 49	48,785 67,030
itchadapisek/Rama IX/Ladprao eo Mobi Rama 9	Ananda Development	Rama 9	Feb-12	703	28	stu 1-br 2-br Duplex	21 30 45-55 42-62	113,000 127,000
pire Rama 9	Asian Property	Rama 9	Jan-12	633	23,25	1-br 2-br	32-39 50-66	start 83,00
palai Wellington	Supalai	Thiam Ruam Mit Road	Mar-12	1002	19fl (9 buildings)	1-br 2-br 3-br 4-br	47 78 124-125 249-251	start 64,50
onburi 20 Mobi Sathorn	Ananda Development	Taksin	Feb-12	529	31	stu 1-br 2-br Duplex	21 30 42-52 42-61	100,000 130,000

Source: CBRE Research and Consulting



Table 5.12 Sales Performance of Completed Condominium Projects of Listed Developers and Ananda Development

PROJECTS	LAUNCH	COMPLE-	DEVELOPERS	TOTAL	% SOLD		
PROJECTS	DATE	TION DATE	DEVELOPERS	UNITS	DEC-11	JUN-12	
Downtown							
Quattro by Sansiri	Q4 2008	Q1 2012	SIRI	446	81%	-	
39 by Sansiri	Q4 2007	Q4 2010	SIRI	163	100%	-	
Prive'	Q4 2007	Q3 2010	SIRI	78	100%	-	
The Address Chidlom	Q3 2006	Q3 2009	AP	597	100%	100%	
The Address Asoke	Q3 2009	Q4 2012	AP	574	99%	100%	
Life @ Sukhumvit 65	Q3 2007	Q4 2009	AP	540	100%	100%	
The Address Pathumwan	Q2 2007	Q3 2009	AP	156	100%	100%	
The Address Phayathai	Q3 2009	Q2 2011	AP	152	95%	99%	
The Address Sukhumvit 28	Q3 2009	Q2 2011	AP	246	98%	99%	
Lumpini Place Rama 4 —	Q1 2010	Q3 2011	LPN	887	100%	100%	
Kluaynamthai							
Supalai Place Sukhumvit	Q4 2009	Q4 2011	SPALI	531	98%	-	
Supalai Casa Riva and	Q4 2004,	Q3 2007, Q4	SPALI	816	90%	-	
Casa Riva Vista 2	Q3 2009	2011					
Supalai River Place	Q2 2006	Q1 2009	SPALI	873	100%	-	
Supalai Premier	Q4 2007	Q4 2010	SPALI	630	100%	-	
Sathon Narathiwas							
Q Langsuan	Q4 2010	Q4 2010	QH	177	40%	51%	
Noble Reveal	Q1 2008	Q1 2011	NOBLE	273	76%	-	
Noble Remix 2	Q4 2010	Q3 2011	NOBLE	149	50%	-	
Collezio	Q3 2009	Q2 2012	MJD	95	35%	-	
Wind Sukhumvit 23	Q3 2006	Q4 2009	MJD	220	98%	-	
Aguston Sukhumvit 22	Q2 2007	Q1 2010	MJD	269	64%	-	
Royce Private Residences	Q1 2010	Q3 2012	MJD	165	51%	-	
Watermark Chaopraya	Q3 2004	Q4 2008	MJD	282	92%	-	
River Tower A						-	
Watermark Chaopraya	Q3 2004	Q4 2008	MJD	208	69%	-	
River Tower B						-	
The Crest Ruamrudee	Q2 2010	Q4 2011	SC	37	86%	-	
The Complete Ratchaprarop	Q2 2006	Q2 2009	PRIN	555	99%	-	
Sub Total Downtown without A				9,119	<b>91%</b>	-	
Ideo Verve Ratchaprarop	Q4 2008	Q2 2012	ADC	447	81%	<b>93</b> %	
Ideo Morph 38*	Q3 2009	Q3 2012	ADC	162	<b>78</b> %	81%	
' Ideo Q Phayathai	Q4 2007	Q4 2010	ADC	476	100%	100%	
Sub Total Downtown with ADC				1,085	<b>89</b> %	<b>9</b> 4%	
Sub Total Downtown				10,204	91%	-	
Midtown							
HIVE	Q2 2008	Q1 2010	SIRI	363	100%	-	
Dcondo Ramindra	Q4 2010	Q2 2012	SIRI	825	94%		

Note: \*Figures only reflect Ideo Morph 38's units in Tower A (i.e. excludes Tower B).



	LAUNCH	COMPLE-		TOTAL	<u>%</u>	OLD
PROJECTS	DATE	TION DATE	DEVELOPERS	UNITS	DEC-11	JUN-12
D condo On Nut - Suvannabhum	Q3 2010	Q2 2012	SIRI	916	100%	-
The Vertical Aree	Q3 2009	Q4 2011	SIRI	189	100%	-
HIVE Taksin	Q2 2008	Q2 2011	SIRI	365	100%	-
Bloc 77	Q1 2009	Q1 2012	SIRI	467	94%	-
Rhythm Ratchada	Q3 2008	Q1 2011	AP	881	100%	100%
Life @ Ladprao 18	Q2 2009	Q1 2012	AP	457	100%	100%
Rhythm Ratchada —	Q1 2010	Q3 2011	AP	539	100%	100%
Huay Kwang						
Life Ratchadapisek	Q3 2011	Q1 2014	AP	837	37%	55%
The Key Phaholyothin	Q4 2010	Q4 2011	LH	505	97%	100%
The Key Prachachuen	Q4 2010	Q2 2012	LH	306	71%	81%
The Room Sukhumvit 62	Q2 2010	Q4 2011	LH	487	99%	100%
The Room Sathon-Taksin	Q3 2010	Q1 2011	LH	268	88%	100%
Lumpini Condotown Ramintra-	Q2 2009	Q1 2011	LPN	1,833	100%	100%
Nawamin (Building A,B,C)						
Lumpini Ville	Q2 2009	Q4 2010	LPN	1,026	100%	100%
Lat Phrao - Chokchai 4						
Lumpini Condotown	Q2 2010	Q4 2011	LPN	690	100%	100%
Ramintra-Nawamin (Building D)						
Lumpini Condotown Nida-Seri Thai	Q1 2011	Q1 2012	LPN	593	100%	100%
Lumpini Place	Q2 2008	Q2 2010	LPN	1,165	100%	100%
Rama 9 - Ratchada (Phase 1)						
Lumpini Place	Q2 2010	Q2 2011	LPN	1,165	99%	100%
Rama 9 - Ratchada (Phase 2)						
Lumpini Place Ratchayothin	Q1 2010	Q3 2011	LPN	1,827	100%	100%
Lumpini Park Pinklao	Q4 2009	Q3 2011	LPN	2,702	100%	100%
Lumpini Ville Bangkhae	Q4 2008	Q2 2010	LPN	272	100%	100%
Supalai Park	Q2 1994	Q2 1999	SPALI	1196	100%	-
Phaholyothin (Building 1 and 2)						
Supalai Park Phaholyothin	Q3 2003	Q4 2005	SPALI	465	100%	-
(Building 3)						
City Home Sukhumvit	Q4 2005	Q3 2008	SPALI	959	100%	-
Supalai Park Srinakarin	Q1 2006	Q3 2009	SPALI	1526	86%	-
City Home Ratchada - Pinklao	Q3 2007	Q1 2010	SPALI	2033	88%	-
City Home Thapra	Q3 2007	Q4 2010	SPALI	620	96%	-
Supalai Park Kaset Nawamin	Q3 2007	Q4 2010	SPALI	1480	97%	-
Supalai City Resort Ramkhamhaeng	Q3 2008	Q4 2010	SPALI	582	90%	-
City Home Rattanathibet	Q3 2008	Q2 2011	SPALI	1236	96%	-
, Supalai Park Tiwanon	Q3 2009	Q4 2011	SPALI	976	98%	-
Be You	Q4 2009	Q3 2011	PS	374	99%	100%
Casa Condo Ratchada Thapra	Q4 2010	Q3 2011	QH	274	51%	66%
Casa Condo Sukhumvit 97	Q1 2011	Q1 2012	QH	218	24%	42%



PROJECTS	LAUNCH	COMPLE-		TOTAL	% S	OLD
PROJECTS	DATE	TION DATE	DEVELOPERS	UNITS	DEC-11	JUN-12
Wind Ratchayothin	Q4 2006	Q4 2009	MJD	390	96%	-
The Centric Scene Rachavipha	Q1 2008	Q4 2010	SC	696	100%	-
Metro Sky Rachada Phase 1	Q4 2008	Q1 2012	PF	441	69%	-
The Pulse Ladprao 44	Q2 2006	Q1 2007	PRIN	202	100%	100%
The Complete Narathiwat	Q2 2007	Q2 2010	PRIN	187	80%	85%
Smart Condo Rama 2	Q2 2009	Q3 2010	PRIN	2062	71%	74%
Smart Watcharaphon	Q3 2010	Q4 2011	PRIN	724	71%	78%
Bridge Paholyothin 37	Q2 2007	Q1 2010	PRIN	264	100%	100%
The Star Estate @ Narathiwas	Q2 2006	Q2 2007	ESTAR	211	90%	-
The Lighthouse Charoennakorn	Q3 2007	Q3 2010	RASA	297	84%	-
Intro Paholyothin Pradipat	Q4 2007	Q3 2010	RASA	450	59%	-
Sub Total Midtown without AD	C			36,541	<b>92</b> %	-
Ideo Mix Phaholyothin	Q4 2007	Q4 2010	ADC	449	100%	100%
Ideo Sathorn-Taksin	Q4 2007	Q2 2010	ADC	349	<b>99</b> %	100%
Ideo Mix Sukhumvit 103	Q4 2007	Q3 2010	ADC	1,172	<b>76</b> %	<b>9</b> 5%
Ideo BluCove Sathorn	Q3 2008	Q1 2010	ADC	266	<b>97</b> %	100%
Ideo BluCove Sukhumvit	Q1 2010	Q2 2012	ADC	421	<b>79</b> %	<b>98</b> %
Ideo Verve Sukhumvit	Q3 2008	Q2 2011	ADC	490	<b>9</b> 4%	100%
Ideo Ladprao 17	Q3 2007	Q3 2009	ADC	339	<b>99</b> %	100%
Ideo Ladprao 5	Q4 2007	Q3 2010	ADC	418	100%	100%
Ideo Ratchada-Huaykwang	Q1 2008	Q1 2010	ADC	398	<b>98%</b>	100%
Sub Total Midtown with ADC				4,302	<b>90</b> %	<b>98</b> %
Sub Total Midtown				40,843	<b>92</b> %	-
Total Completed Condominiun	n without ADC			45 <b>,66</b> 0	<b>92</b> %	•
Total Completed Condominium	n with ADC			5,387	88%	<b>97</b> %
Total Completed Condominium	1			51,047	<b>91%</b>	_

Source: Based on publicly available information from quarterly presentations and annual registration forms (56-1)

#### Sales in Developments Under Construction by Selected Developers

The sales performance of condominium developments that are under construction in the downtown area was 66% compared to 58% in the midtown area. There are a total of 62,699 units in 86 developments that are currently under construction in both areas. Over 5,000 are still available in the downtown area and this implies that buyers have a wide selection of properties to choose from. In the midtown area, there are still 19,373 units available in buildings under construction. Sales in the midtown area have not kept up with the number of new condominium launches and this has resulted in a lower average sale performance when compared to projects in the downtown area.



PROJECTS	LAUNCH	ESTIMATED	DEVELOPERS	TOTAL	% S	OLD
	DATE	COMPLETION DATE		UNITS	DEC-11	JUN-12
DOWNTOWN						
PYNE by Sansiri	Q1 2010	Q3 2013	SIRI	298	100%	-
KEYNE by Sansiri	Q1 2010	Q4 2013	SIRI	216	95%	-
Via 49	Q3 2010	Q3 2012	SIRI	85	99%	-
Via BOTANI	Q4 2010	Q4 2012	SIRI	137	72%	-
The Base	Q4 2010	Q4 2012	SIRI	1,227	100%	-
CEIL by Sansiri	Q1 2011	Q1 2013	SIRI	376	65%	-
Life Ratchadapisek	Q3 2011	Q1 2014	AP	837	37%	55%
The Address Sathorn 12	Q3 2009	Q3 2012	AP	562	83%	89%
Rhythm Sathorn	Q3 2010	Q2 2014	AP	910	57%	65%
The Address Sukhumvit 61	Q4 2011	Q4 2013	AP	98	28%	36%
The Room Sukhumvit 21	Q3 2011	Q1 2014	LH	213	39%	73%
Lumpini Park - Riverside Rama 3	Q4 2010	Q3 2012	LPN	2,400	65%	74%
Supalai Park Asok - Ratchada	Q4 2009	Q4 2012	SPALI	554	99%	-
Supalai River Resort	Q12010	Q2 2014	SPALI	858	65%	-
Supalai Premier Ratchathewi	Q4 2010	Q4 2013	SPALI	582	54%	-
Supalai Premier Asoke	Q3 2011	Q4 2014	SPALI	653	75%	-
Chapter One	Q1 2010	Q2 2013	PS	1875	56%	69%
Noble Refine	Q3 2009	Q2 2013	NOBLE	243	98%	-
Noble Revent	Q3 2010	Q1 2014	NOBLE	261	97%	-
Noble Reform	Q1 2009	Q4 2012	NOBLE	194	90%	-
Noble Ploenchit	Q2 2011	Q4 2017	NOBLE	1443	37%	-
Noble Unite	Q3 2011	Q4 2014	NOBLE	255	19%	-
N Silom	Q2 2011	Q3 2013	MJD	161	22%	-
N Phyathai	Q2 2011	Q4 2013	MJD	215	41%	-
The Marvel Residence Thonglor 5	Q3 2011	Q3 2012	MJD	73	20%	-
The Crest Sukhumvit 24	Q4 2011	Q1 2013	SC	82	30%	-
The Crest Sukhumvit 49	Q4 2011	Q1 2013	SC	88	16%	32%
The River	Q1 2007	Q4 2012	RML	838	76%	76%
185 Rajadamri	Q3 2010	Q3 2013	RML	268	51%	55%
/antage	Q1 2010	Q3 2013	ESTAR	322	55%	-
Sub Total Downtown without ADC				16,324	<b>6</b> 4%	-
deo Mobi Phayathai	Q1 2012	Q3 2013	ADC	330	-	88%
Sub Total Downtown				16,654	<b>63</b> %	-
Nidtown						
ONYX Phaholyothin	Q4 2010	Q2 2013	SIRI	620	99%	-
WYNE Sukhumvit	Q3 2010	Q3 2012	SIRI	460	43%	-
TEAL Sathorn - Taksin	Q4 2010	Q4 2012	SIRI	409	95%	-
Dcondo Ramkamhang	Q4 2010	Q2 2013	SIRI	1120	81%	-

Table 5.13 Sales Performance of Condominium Projects Under Constructionby Listed Developers and Ananda Development



PROJECTS	LAUNCH	ESTIMATED	DEVELOPERS	TOTAL	% S	OLD
	DATE	COMPLETION		UNITS	DEC-11	JUN-12
		DATE				
Dcondo Charun-Bangkunon	Q4 2011	Q4 2012	SIRI	445	100%	-
The Base Changwattana	Q1 2012	Q2 2013	SIRI	1231	41%	-
Rhythm Sukhumvit 50	Q3 2010	Q1 2013	AP	589	99%	100%
Rhythm Phahol - Aree	Q3 2010	Q3 2013	AP	809	52%	63%
Aspire Rama 4	Q4 2010	Q4 2012	AP	1,432	45%	66%
Aspire Ngamwongwan	Q4 2010	Q4 2013	AP	1,458	40%	46%
Aspire Srinakarin	Q2 2011	Q4 2012	AP	330	33%	45%
Rhythm Sukhumvit 44/1	Q2 2011	Q3 2013	AP	486	79%	91%
Aspire Rama 9	Q1 2012	Q2 2014	AP	663	75%	83%
Aspire Sukhumvit 48	Q1 2012	Q2 2014	AP	858	20%	26%
The Key Cheangwattana	Q4 2010	Q3 2012	LH	988	66%	81%
Lumpini Ville Lasalle-Barring	Q1 2011	Q4 2012	LPN	1,032	100%	100%
Lumpini Condotown Nida-Seri Thai 2	Q1 2011	Q2 2012	LPN	798	63%	72%
Lumpini Ville Phibulsongkhram-Riverview	Q1 2011	Q4 2012	LPN	768	100%	100%
Lumpini Ville Chaengwatthana-Pakkret	Q1 2011	Q4 2012	LPN	1,622	59%	66%
Lumpini Ville Pattanakarn-New Phetchaburi	Q2 2011	Q3 2012	LPN	1,605	63%	65%
Lumpini Condotown Ramintra-Lat Pla Khao	Q4 2011	Q4 2012	LPN	1,035	72%	84%
Lumpini Ville Sukhumvit 109-Bearing	Q1 2012	Q4 2012	LPN	795	28%	61%
Lumpini Mega City Bangna	Q4 2011	Q1 2013	LPN	1,169	60%	74%
Supalai Park Ratchayothin	Q3 2010	Q4 2012	SPALI	826	94%	-
City Home @ Srinakarin	Q3 2010	Q4 2012	SPALI	1100	14%	-
Supalai Park Ratchaphruek - Petchkasem	Q3 2011	Q3 2013	SPALI	845	100%	-
Supalai Park Khae Rai- Ngamwongwan	Q3 2011	Q3 2014	SPALI	692	76%	-
Supalai Park Ekamai Thonglor	Q4 2011	Q1 2015	SPALI	676	73%	-
The Tree (3 Projects)	Q4 2010	Q3 2013	PS	2444	40%	64%
	Q3 2011	Q3 2014				
	Q1 2012	Q4 2015				
Fuse (2 Projects)	Q1 2010	Q4 2012	PS	1776	69%	76%
	Q3 2010	Q2 2013				
Plum Condo (2 Projects)	Q1 2011 Q1	Q2 2013	PS	1440	43%	62%
	2012	Q2 2013				
The Trust Residence Pinklao*	Q3 2010	Q4 2012	QH	1,408	51%	57%
Casa Condo Asoke Din Daeng	Q2 2011	Q2 2013	QH	920	39%	47%
The Trust Residence Rachada Rama 3	Q1 2011	Q3 2013	QH	1,685	41%	46%
Noble Re: D	Q1 2010	Q2 2013	NOBLE	272	74%	-
Equinox Phahol-Vibha	Q3 2010	Q4 2013	MJD	490	53%	-
' M Ladprao	Q2 2011	Q1 2014	MJD	313	46%	-
The Crest Phahoyothin	Q4 2010	Q4 2012	SC	163	47%	60%
The Centric Rachada Suthisarn	Q4 2010	Q4 2012	SC	270	93%	100%
The Centric Tiwanon	Q4 2011	Q1 2014	SC	1063	37%	59%
Metro Park Sathorn Phase 3	Q1 2009	Q4 2012	PF	2155	36%	-





PROJECTS	LAUNCH	ESTIMATED	DEVELOPERS	TOTAL	% S	OLD
	DATE	COMPLETION DATE		UNITS	DEC-11	JUN-12
Metro Sky Sukhumvit Phase 1	Q4 2008	Q4 2012	PF	588	39%	-
I-Condo Ngamwongwan	Q4 2010	Q4 2012	PF	480	58%	-
I-Condo Sukhabibal 2	Q3 2010	Q4 2012	PF	1100	29%	-
I-Condo Sukhumvit 105	Q3 2010	Q4 2012	PF	1600	32%	-
The Breeze	Q1 2010	Q4 2013	ESTAR	294	56%	-
Starview	Q1 2011	Q3 2014	ESTAR	556	29%	-
Sub Total Midtown without ADC				43,878	55%	-
Ideo Mobi Sathorn	Q1 2012	Q3 2013	ADC	529	-	<b>93</b> %
Ideo Mobi Sukhumvit A	Q1 2012	Q3 2013	ADC	446	-	43%
Ideo Mobi Sukhumvit B	Q1 2012	Q3 2013	ADC	489	-	54%
Ideo Mobi Rama 9	Q1 2012	Q3 2013	ADC	703	-	<b>56%</b>
Sub Total Midtown with ADC				2167	0%	<b>62</b> %
Sub Total Midtown				46,045	53%	-
Total Condominium Under Constru	ction without AI	C		60,202	58%	•
Total Condominium Under Constru	ction with ADC			2,497	-	<b>65</b> %
Total Condominium Under Constru	ction			62,699	55%	-

Source: Based on publicly available information from quarterly presentations and annual registration forms (56-1)

Sale results by publicly listed developers in 2011 were mixed with many developers having 1 to 2 projects, which were launched in 2010 and 2011, not being sold out. CBRE has also observed different sales performance across different localities with developments in midtown outperforming developments in downtown for existing supply and vice versa for future supply.

CBRE believes that the condominium market is now driven mainly by end-user demand. End-users have maximum lump sum price that they can afford. Developers can respond by making units smaller but there is a limit to how small a unit can be before buyers reject it as not useable. The smallest units so far have been 21 sq.m. Entry-level condominiums are priced at below THB 50,000 per sq.m. in non-prime locations and higher than THB 100,000 per sq.m. for developments close to mass transit systems. However, total price has been kept below THB 2.5 million. Developers are trying to balance affordability with usability. Some developers have decided that usability is a priority and have launched projects in less prime locations with one-bedroom size larger than 40 sq.m. but keeping total price around THB 3 million and also introducing two-bedroom units sized around 65 sq.m. priced at around THB 5 million. Other developers have decided that location is the key selling factor and have reduced the unit size to ensure affordability.

CBRE believes that the smallest units being offered have reached the minimum useable size and do not foresee further scaling down of units. In that regard, developers have to try to reduce costs by building efficiently although land prices in the best locations continue to rise and developers are becoming increasingly cautious about acquisition cost.

CBRE thinks there could also be competition from "shadow inventory", these are units that were launched in 2010 and early 2011 when CBRE saw more speculative purchaser activity. These purchasers are trying to resell and will compete with both developers' unsold inventory and with new projects. The outlook for the one-bedroom market is going to be far





more mixed with successful launches by some developers in some locations and developers struggling in other locations to sell inventory before the buildings are completed.



#### **OVERVIEW**

The developer-built housing market is improving due to better supply dynamics supported by continued demand. The number of completions of developer-built single-detached houses has increased for the first time since the last peak in new supply in 2004. In 2011, 13,087 developer-built single-detached houses were completed in the BMR, an increase of 14.2% from 11,461 units in 2010.

The drop in new housing supply between 2004 and 2009 had been a result of developers not being able to provide a product that matched buyer's size requirements at a price they could afford and in a location that was practical.

However, improvement in infrastructure with the extension of mass transit lines into the suburbs specifically the ARL and the MRT Purple Line together with a steady improvement in roads, has meant that more areas have now become accessible and convenient for prospective home buyers. Hence, developers have been able to acquire land at accessible suburb locations and at lower prices to accommodate for peoples' larger living requirements at affordable prices.

Demand for these single-detached houses has also remained strong despite the high growth rates on the condominium segment. This is mainly due to the fact that the growth in the condominium segment has been fuelled by fresh demand while the demand for detached houses is sustained by families who find the small size of condominium units impractical. The sustained demand is further supported by rising family income and the increasing availability of mortgage financing.

The housing market is dominated by end-user purchasers. There is no speculative buying and virtually no buy-to-rent investment.

Thais buy single-detached houses and townhouses to live in and do not treat them as a tradable investment asset. There is very little demand for second-hand properties. Thai home purchasers prefer to buy new developments and prefer to purchase from large developers who are mainly publicly listed companies. Buyers want the certainty of a company with an established track record so they can be confident that they will get a quality product delivered on time.

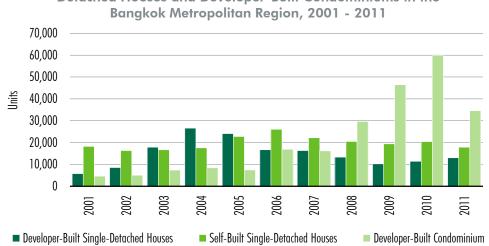


Figure 6.1 New Supply of Self-Built and Developer-Built Single-Detached Houses and Developer-Built Condominiums in the Bangkok Metropolitan Region, 2001 - 2011



Source: CBRE Research and Consulting

#### **EASTERN BANGKOK**

CBRE has undertaken a market survey of Eastern Bangkok where all of Ananda Development's housing projects are located.

Map 6.1 Retail Map for Eastern Bangkok



Note: • Tesco Lotus 1) Seacon Square 2) Paradise Park 3) Mega Bangna 4) Central Bangna

Source: CBRE Research and Consulting

The Eastern Bangkok area has become increasingly popular for several reasons.

The completion of Suvarnabhumi Airport in September 2006 was a significant catalyst because there were significant road improvements making the area more accessible.

The completion of the ARL in August 2010 which operates as a mass transit system also improved the attractiveness of the area along that route.

The facilities in the region have also improved including older shopping centres such as Paradise Park (formerly Seri Centre) on Sri Nakarin Road and Central Bangna which have been renovated and revitalised.

In May 2012, the 180,000 sq.m. Mega Bangna was opened and earlier on the same site IKEA opened a 40,000 sq.m. store, their first store in Thailand. IKEA's choice of Eastern Bangkok for their first store location shows the popularity of this area as a residential location.

Many areas of Bangkok were flooded in late 2011 with one of the main exceptions being the Eastern area. CBRE has seen the return of purchasers to most areas, even those that were flooded, but areas that were not flooded are being seen as more attractive.



CBRE has analysed the top 5 public listed housing development companies based on reports to the SET and company presentations. CBRE has set out on the following table to show the performance of the projects of these developers in the Eastern area.

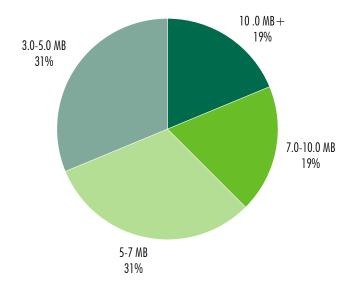
#### **DEFINITION OF TARGET MARKET**

CBRE has classified housing by target market into four categories:

Luxury	Above THB 10 million
High-End	THB 5 – 10 million
Mid-range	THB 3 – 5 million
Entry-level	Below THB 3 million

Out of 3,112 single-detached house properties (units) being offered by these developers in the Eastern Region, 66% had been sold

Figure 6.2 Average Prices of Single-Detached House Properties in the Eastern Region , Q1 2011



Source: CBRE Research and Consulting



CBRE Thailand

			TOTAL			UNSOLD	SALES VALUE OF TOTAL UNITS SOLD	AVERAGE SALES PER UNIT SOLD
PROJECTS	TARGET MARKET	DEVELOPERS	NITS	UNITS SOLD	0% SOLD	UNIT	(MILLION THB)	(MILLION THB)
The Centro (Sukhumvit 113)	Mid-range	Asian Property	188	186	9666	2	870	5
The Centro (Romintra)	High-end	Asian Property	296	139	47%	151	799	9
The Centro (On Nut - Wongwan)	High-end	Asian Property	216	43	20%	173	324	8
Perfect Masterpiece Ekamai - Ramintra	Luoury	Property Perfect	230	219	92%	II	3,248	15
Perfect Masterpiece Roma 9	Lucury	Property Perfect	284	163	57%	121	2,356	14
Perfect Place Ramkhanhaeng - Suvarnabhumi	High-end	Property Perfect	307	71	23%	236	397	9
Perfect Park Surarnabhumi Phase 1-2	Mid-range	Property Perfect	503	259	51%	244	1,055	ч
Bangkok Boulevard (Ramindra Km.2)	Lucury	SC Asset	74	74	100%	0	766	10
Life Boulevard (Ramintra 23)	High-end	SC Asset	180	180	100%	0	1/1/1	7
Life Boulevord (Ring Rood - On Nut)	High-end	SC Asset	152	901	70%	46	629	9
Casa Ville (Bang Na - Surarnabhumi)	Mid-range	Q House	216	143	9699	73	637	A
Boon Coso City (Sulchumvit 101/1)	Mid-range	<b>Q House</b>	20	50	100%	0	221	4
Sathasiri (Bang Na - Wongwan)	High-end	Sansiri	217	217	100%	0	1,621	7
Burasiri (On Nut - Bang Na)	High-end	Sansini	229	147	96439	82	839	9
Greenside by Sansiri	High-end	Sansiri	46	46	100%	0	159	3
Setthasiri (Srinakarin - Rama IX)	High-end	Sansini	233	102	44%	131	906	6

Table 6.1 Sales Performance of Single-Detached House Projects by Public Listed Developers in the Eastern area of Bangkok,

Source: CBREResearch and Consulting \*Data as of 31 March 2012



# **Housing Market Analysis**



# SALES PERFORMANCE OF SINGLE-DETACHED HOUSES IN THE EASTERN AREA OF BANGKOK

CBRE surveyed publicly available results of housing developers' actively marketed projects in the eastern area of Bangkok. Three developers, namely Pruksa, Land and House and Supalai, were not included because they did not provide details for each project's units sold and percentage sold.

Most of the supply of single-detached house units offered in the eastern part of Bangkok is in the high-end market (THB 5-10 million) with 1,876 units followed by 648 units of midrange market (THB 3-5 million) and 588 units of luxury market (greater than THB 10 million). In terms of unit sales performance, the mid-range market has the highest result with 86.3% of units offered being sold, followed by 77.6% for luxury market, and 56.1% for high-end market.



<b>Housing Market Analysis</b>	Housing	Market	Anal	ysis
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PROJECTS	TARGET MARKET	DEVELOPERS	TOTAL	STINU	% SOLD	UNSOLD	SALES VALUE OF TOTAL UNITS SOLD (MILLION THB)	AVERAGE SALES PER UNIT SOLD (MILLION THB)
Boon Klang Muang Urbanion (Srinakarin)	Mid-range	Asian Property	207	661	9696	89	883	đ
Boon Klang Muang S-Sense (On Nut - Wongwan)	Mid-range	Asian Property	338	35	28%	243	280	m
Boan Klang Muang S-Sense (Srindkarin)	Mid-range	Asian Property	212	32	15%	180	138	म
The Villo Ramkhanhoeng - Suvarnabhumi	Entry-level	Property Perfect	284	273	9696	II	629	2
The Villa Rimintro - Outering	Entry-level	Property Perfect	295	168	57%	127	390	2
The Metro Roma 9	Mid-ronge	Property Perfect	554	483	87%	Ц	1,173	2
Town Plus On Nut - Ladkrabang	Mid-range	Sansini	198	197	9666	-	667	m
Town Plus Teparak	Mid-range	Sansiri	274	195	21%	79	541	m
Town Avenue Srinakarindra	Mid-range	Sansiri	235	123	52%	112	540	a
Lanta Resortlife	Mid-range	ADC	1/1	96	56%	75	418	3.0-5.0
Maldives Palms	Mid-range	ADC	493	335	68%	158	<i>L</i> E0'1	25-45
Waikika Shore	Mid-range	ADC	111	19	34%	911	340	4.0-6.0
Similan Reef	Mid-range	ADC	244	74	30%	0/1	162	3.0-5.0
Maldives Beach	Mid-range	ADC	815	191	9/6EE	548	787	25-45
Bali Beach	Entry-level	ADC	969'1	346	20%	1,350	582	1.0-4.0
Sirinda Pranali	Mid-range	ADC	35	31	89%	4	115	38-4.2
Sirinda Prana	Mid-range	ADC	Œ	IE	9/6/6	-	133	2.0-2.5
Ananda Sport Life	High-end	ADC	216	211	9/686	5	1,363	5.5-9.0

Source: CBRE Research and Consulting