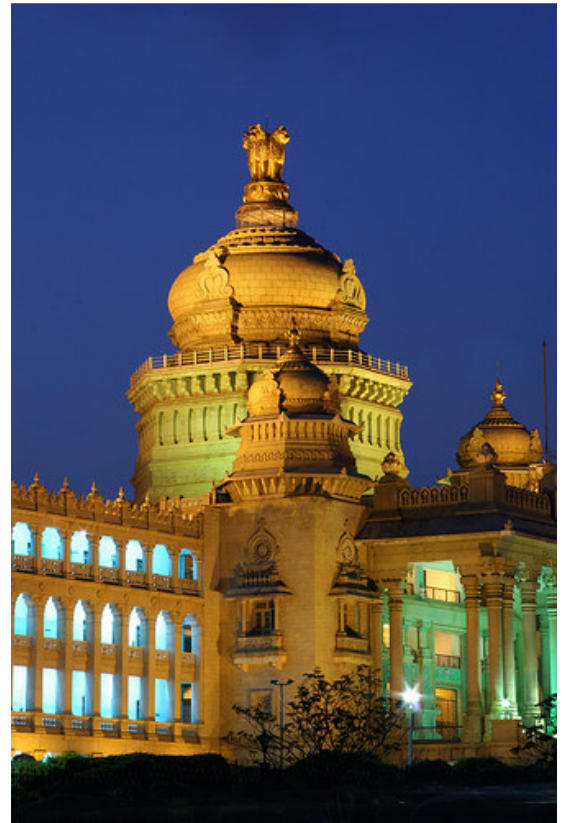


## Bangalore Overview

- Bangalore, the capital of the Indian state of Karnataka, is the third largest city in India with over 6.1 million people residing in its metropolitan area.
- Over the years, the city has developed into a major manufacturing and information technology center, accounting for over 35% of India's software exports.
- Bangalore is also commonly referred to as the Silicon Valley of India due to the large concentration of multinational software and information technology companies in the area.
- Aside from its technological industries, the city's biotechnology sector is also slowly expanding. At present, Bangalore is the preferred location for biotechnology corporations with over 127 companies headquartered in the metropolitan area.
- As a major economic center producing over \$51.9 billion annually in domestic GDP, Bangalore is India's fastest growing market for international investment. Last year, foreign direct investment totaled to over \$3.7 billion, which is the 3<sup>rd</sup> highest for an Indian city.

## History

- According to old inscriptions, Bangalore was established in 890 CE as part of the Ganga Dynasty. Modern Bangalore was referred to as the "Gandu Bhoomi" or the "Land of Heroes" by its founder Kempe Gowda I, who ruled the city in 1537.
- The city was incorporated into the British East Indian Empire in 1799 after the defeat of Tippu Sultan during the fourth Anglo-Mysore War. Under British rule, Bangalore was placed under the Madras Presidency and became the capital of the province in 1864.



Parliament Building Vidhana Soudha, Bangalore



Bangalore, India

## Geography & Climate

- Bangalore is located in the southeast of the South Indian State of Karnataka. The city borders the Indian cities of Kolar in the northeast, the Tumkur in the northeast, the Mandya in the southwest, Chamarajanagar in the south, and the state of Tamil Nadu in the southeast.
- The city enjoys a temperate and pleasant climate throughout the year although it experiences monsoons around mid September to October. Average temperature ranges from 54°F in the winter to 100°F in the summer. Average annual rainfall is 33.81 inches.

## Labor Force & Education

- Bangalore has a metropolitan population of over 6 million residents, which makes it the 27<sup>th</sup> largest city by population in the world.
- Although English is the Lingua Franca for the working population, other languages spoken in include Tamil, Telugu, Tulu, Malayalam, and Kannada, which is the official language for the state of Karnataka. Bangalore's literacy rate is 83%, which is the second highest literacy rate for an Indian city after Mumbai.
- Private schools in Bangalore mostly use English as the medium of instruction. Prominent universities include the Indian Institute of Science, University of Visvesvaraya College of Engineering, Indian Institute of Management Bangalore, Bangalore Medical College, People's Education Society Institute of Technology, and many others.



Indian Institute of Science is ranked as one of the best universities in India.



Bangalore is a booming metropolitan city

## Economy & Incentives

- Bangalore is India's fastest and largest growing market with the highest domestic per capital income at \$6,460.
- Major industries include manufacturing, aerospace, telecommunications, machine tools, heavy equipment, space and defense, software services, and information technology.
- Bangalore has several important public manufacturing industries such as Hindustan Aeronautics Limited, National Aerospace Laboratories, Bharat Heavy Electricals Limited, Bharat Electronic Limited, and Hindustan Machine Tools.
- The IT industry is very significant to the city, valued at to over \$22 billion. Moreover, there are over 38% of global SEI-CMM level 5 companies headquartered in Bangalore.

## Transportation

- Bangalore HAL (Hindustan Aeronautics Limited) Airport functions as both a domestic and international airport with direct flights to many destinations including Asia, the Middle East, and Europe. The airport is also the hub for local airline carriers including Spice Jet, Kingfisher Airlines, Jet Airways, Go Air, and Air Deccan. The airport is also a test and development center for the Indian Air Force.
- Plans made in 1991 to develop a large-scale Bangalore international airport have finally started in 2005 with government and private stakeholders like Siemens, Zurich Airport, and Larsen and Toubro as major financial contributors. Completion is expected in April 2008.
- Bangalore has a local metro system and the city is well connected with other major Indian cities like Mumbai, Chennai, Kolkata, and Hyderabad through the Indian Railways.

## Economic Indicators

<b>Bangalore</b>		<b>2007</b>
Real GDP Growth		n/a
GDP		\$ 51.9 billion
Inflation Rate		4.41 %
Unemployment Rate		6.0%
<b>India</b>		<b>2007</b>
GDP – Purchasing PP		\$ 4.04 trillion
Real GDP Growth		8.5 %
Inflation Rate		5.3 %
Labor Force		509.3 million
Unemployment Rate		7.8%
Literacy Rate		59.5 %
Exchange Rate	1 INR = 0.02485 USD	

## Real Estate Market Overview

- Prime grade A office properties are concentrated in the CBD, SBD, Whitefield, Electronic City, and Outer Ring Road. At present, Outer Ring Road, and Bannerghatta are experiencing a boom in its real estate activities.
- With this positive outlook, more office new supply is expected to be introduced for the second quarter of 2007, which will reduce the supply and demand mismatch.
- Due to the growing domestic economy, the Bangalore retail market is experiencing rise in demand from retailers wishing to expand their commercial locations, particularly in secondary high streets as supply is restricted in prime districts.
- Demand in the real estate market was primarily driven by the IT industry, most of which are seeking for larger floor space building capacity, better social infrastructure, and lower rental rates.

## Office Market

- Bangalore office market has a grade A office total supply of about 1.2 million square feet available during the first quarter of 2007. Most of the office stock, estimated at 40%, is located in Bannerghatta, which has the highest level of demand in the region. EPIP Zone/Whitefield and Outer Ring Road also introduced new supply into the office real estate market during the first quarter of 2007.
- Rental values in the CBD are expected to rise by at least 12% due to high demand and low supply conditions. Overall rental rates are also expected to increase by 5-7%, particularly in the Bannerghatta and Outer Ring Road districts.
- Electronic city and Whitefield rental rates have remained stable from fourth quarter 2006 to first quarter 2007.
- Due to excessive supply and decreased demand as a result of infrastructure problems, traffic congestion and bottlenecks, rental rates in the Electronic city and Bannerghatta are expected to fall in the next quarter. However, the stabilization of rental rates in these markets is also expected for the next upcoming quarters.

## Some Multinationals in Bangalore

- Motorola
- Philips
- Intel
- BEA Systems, Inc
- HP
- Infosys Technologies
- Samsung
- I-flex Solutions
- Info Net
- Oracle
- Digimaker
- Texas Instruments

## Major Offices Districts

- CBD
- Hosur Road
- EPIP Zone/Whitefield
- Sarjapur
- Electronic City
- Bannerghatta Road
- SBD
- North Bangalore

## Office Sub-Markets

- These new emerging submarkets like the Outer Ring Road, Sarjapur, and North Bangalore are developing and are becoming more attractive as a location for IT companies. Due to the growing demand from IT companies, these office submarkets are slowly gaining demand and leasing activities from retailers and commercial developers.
- Major leasing transactions were largely driven by the IT sector, totaling to over 1.4 million square feet of office space absorbed during the end of the fourth quarter in 2006.

## Office Rental Information 1Q 2007 (USD/Sq Ft/Month)

District	Ave. Rent	Vacancy	Total Stock	New Supply	Absorption
CBD	\$1.60	2.0%	N/A	0	N/A
Hosur Road	\$0.54	N/A	N/A	0	N/A
EPIP Zone/Whitefield	\$0.51	17%	N/A	240,000	N/A
Electronic City	\$0.51	N/A	N/A	0	N/A
Bannerghatta Road	\$0.98	4.0%-6.0%	N/A	400,000	N/A
Outer Ring Road	\$0.93	4.0%-6.0%	N/A	240,000	N/A
Total	\$1.32	5.0%	18,300,000	1,200,000	85%



MG Road is one of the most popular commercial centers in Bangalore

**Class A Retail Rental Information**  
(USD/Sq Ft/Month)

Retail	Rent (low)	Rent (high)
Prime	\$1.10	\$4.40
Retail	Vacancy Rate	Inv. Yield
Prime	10.0%	10.0%

**Regional Commercial Rental Information**  
(USD/Sq Ft/Month)

Retail	Rent (low)	Rent (high)
Regional	\$1.10	\$4.40
Retail	Vacancy Rate	Inv. Yield
Regional	N/A	12.0%

**Industrial Market**

- The city of Bangalore was heavily engaged in the manufacturing of heavy industrial materials and machinery for national and local firms such as the Hindustan Aeronautics Limited, Indian Telephone Industries, Husdustan Machine tools, and Bharat Electronics Limited. Today, Bangalore has shifted its focus from heavy industries to the development of high technology industries.
- Bangalore has the largest concentration of IT firms in India, prompting the city to be known as the Silicon Valley of India.
- The city's industrial market is also involved in research and development, electronics, and software production.
- Bangalore is also focusing on strengthening its Biotechnology industry. The city is the base for 97 biotechnology companies in India, including Biocon, which is the India's leading biotechnology company and ranks 16<sup>th</sup> in world revenue.

**Investment**

- As a result of its booming information technology industry and its developing international business environment, Bangalore received approximately \$3.7 billion in foreign direct investment in 2006.
- The strong confidence of multinational corporations on the city's economy has also lead to positive outcomes for the real estate market. Property values have increased by 20% and capital appreciated on real estate land values have grown by at least 30% compared to last year.

**Retail Market**

- The 2006 development of the Embassy Mall on Residency Road, which will introduce 120,000 square feet of retail floor space, is expected to become operational by the first quarter of 2008.
- A large portion of the new retail supply will come from commercial projects completed in the end of 2006. Lido Mall, Sigma Grad, UB City Mall, Esteem Mall will contribute to a rentable total supply of 880,000 square feet.
- Prime rental values on high streets have shown an increase by 10-13% during the last quarter of 2006 while rental rates on secondary high streets have also shown growth by 20-25%. Due to the high demand in prime retail districts, overall rental values are expected to rise during the coming quarters in 2007.

**Major Retail Zones**

- Ulsoor Road
- Marathalli Outer Ring Road
- Vithal Mallya
- Brigade Road
- 100 ft Road, Indira Nagar
- Bellary Road
- Residency Road
- MG Road
- 11<sup>th</sup> Main Road, Jayanagar
- South End Road



Corporate Headquarters of I-flex Solutions in Bangalore

**Industrial Business Parks**

- Electronics city, founded in 1976, was one of the first industrial parks in Bangalore to specialize in the Information Technology Industry. Starting at only 0.5 square miles, this electronics park now covers an area 7.7 million square feet and it houses many multinational companies like Hewlett-Packard, Motorola, Infosys, Siemens, ITI, and many more.
- The International Technology Park, located in Whitefield Northeast Bangalore, is a 1.9 million square feet facility. It has 5 buildings aptly named Discover, Innovator, Creator, Explorer, and Inventor. This industrial park also has an Export Promotion Zone, which provides extra services for international technology firms like Dell, Unisys, Delphi, Oracle, Perot Systems, and Delphi.
- The Inner Ring Road cluster, near the HAL Airport in Challaghatta, also serves as manufacturing and office location for 19 major multinational firms including Microsoft, Yahoo!, NetApps, McAfee, Bearing Point, Fidelity, etc.
- The Ballandur Outer Ring houses 14 technology and electronic firms like Nokia, Intel, Cisco, and Oracle.
- The Bagmane tech Park is located in Raman Nagar and this business facility houses numerous international firms like i-fles Solutions, Samsung, Motorola, Cognizant, and many others.
- Bangalore Forum for IT represents 20 major multinational IT firms like Sun Microsystems, Texas Instruments, Philipp’s, Novell, vMoksha, Synopsis, HP, and Motorola.

**12-Month Forecast**

**Office Market:**

- Bangalore office market is expected to show positive trends in the upcoming quarters. New supply will be introduced in the second quarter of 2007, which will stabilize the rising rental rates in the city.
- The government’s plans to create a Greater Bangalore, which will expand the borders of the metropolitan area from 109 square miles to 250 square miles. This expansion is predicted to introduce better infrastructure to suburban areas and lead to the overall development of the whole metropolitan region.
- The impending opening of the Bangalore international airport in early 2008 is expected to increase rental rates in the surrounding areas although rates maybe offset by new supply.



UB City is an emerging commercial district

**Industrial - Business Park Rental Information**  
(USD/Sq Ft/Month)

	Average Effective Price
<b>Bulk Warehouse</b>	\$0.22 - \$0.28
<b>Manufacturing</b>	\$0.22 - \$0.55
<b>High-tech</b>	\$0.55 - \$0.77
<b>R&amp;D</b>	\$0.66

**Industrial Development Rental Information**  
(USD/Sq Ft/Month)

	Average Effective Price
<b>Land in office parks</b>	\$77.00
<b>Office land non-park</b>	\$55.00
<b>Land in Industrial parks</b>	\$33.00
<b>Industrial land-non park</b>	\$55.00



Infosys headquarters in Bangalore

**12-Month Forecast**

**Retail Market:**

- The strong demand from retailers in the prime high retail streets of Indira Nagar and Jayanagar 4<sup>th</sup> Block are expected to continue, which will prolong the high rental rates in these commercial districts.
- As a result of the retail boom in the Indian market, recent commercial construction and retail development will introduce new supply, totaling to over 5 million square feet over the next 3 years.
- Due to the new supply and high demand in the retail market, rental values are expected to increase in the short term.






**Industrial Market**

- Construction and development have started in 2007 in order to improve infrastructure in industrial parks within the region.
- The Outer Ring Road is being upgraded and construction of new transportation routes has begun in order to reduce the traffic congestion in the area. The development of a new flyover in Hosur Road near the Electronics city has also started.
- These improvements in industrial park infrastructure are expected to lead to an increase in rental rates as demand from the IT sector continues to remain strong.

**Bangalore Outlook:**

- India’s economic growth is expected to continue to increase by the rate of 8-9% per annum, which should prolong its international competitive edge in the IT/ITES industries. Bangalore’s IT sector with its growth rate in excess of 30% on a year-on-year basis, will continue to be the predominant contributor to the strong demand in the office and industrial real estate market.

**12 –Month Forecast  
Rental Rates**

<b>Office Market</b>	
<b>Retail Market</b>	
<b>Business Parks</b>	
<b>Logistics</b>	
<b>Manufacturing</b>	



Art of Living Ashram, Bangalore



Bangalore Palace

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