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Bengaluru Rising

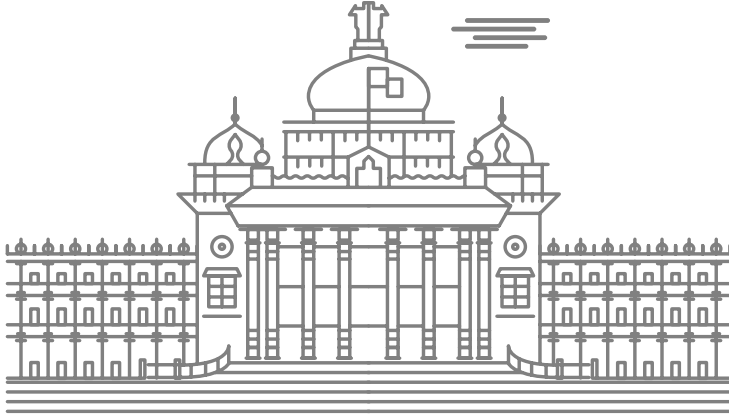
How Bengaluru is closing the gap to Delhi and Mumbai as an economic, employment and wealth creation hub. Where it leads and where it lags.

2024



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Bengaluru Rising



2024

Preface

In the digital era, virtually everything can be tracked and measured. From the most intimate data on sleep and food, to larger data sets like traffic and the most popular gigs in a city. All of it is in fact available real time with interesting charts analysing trends and spotting patterns at the tap of a button. Being involved in the startup and technology world for close to three decades, I have witnessed the power of data and its pivotal role in decision making in a rapidly changing environment. But away from the tech world, as a Bangalorean when I looked at the city, it seemed to be living in a pre-historic data era. This often weighed on my mind as I looked at Bengaluru as a city.

India's tech hub and startup capital has been growing rapidly. The growth has brought in dramatic multi-layered shifts—for good and for worse—within the city. But often, patchy, dated or even non-existent data has meant that there is a huge gap between perception and reality. Unsurprisingly, policy and planning have often happened in a data vacuum. Partly, this is an India problem, thanks to the country's archaic



data gathering infrastructure. But in the case of Bengaluru, the perception-reality mismatch is compounded for multiple reasons. The city's high velocity of growth means it is changing rapidly. Unlike mega cities like Delhi and Mumbai that have grown over centuries, Bengaluru was a small town that has entered the big city club only in the recent decades. As a result, the data-reality gap is starker for Bengaluru. It doesn't make it any easy that the city's digitally native residents pick and amplify issues shaped by their social media echo chambers.

What is undeniable is that our mega cities will continue to remain economic engines and employment hubs. It is imperative that both policies and perspectives are grounded in reality. Access to relevant and updated data is of utmost importance. The fact that our cities are administrative orphans makes it even more pertinent.

Can we at UnboxingBLR Foundation do something about it? That need and desire sowed the seed for this report. In an era where digital infrastructure increasingly offers real time compelling insights, can we harness data to understand our cities better? This is especially relevant in the context of our mega cities where

more and more residents are digital natives. The intent is to inform policy making, throw light on issues—that don't get talked about—but are relevant for our cities and pick trends and patterns that are emerging and exciting. Above all, stoke healthy rivalry among our top cities to understand and compete against each other eventually improving lives and living in our cities.

I am confident this data report will help bring an informed, nuanced and data-led understanding of India's top cities.

Prashanth Prakash
Chairman, UnboxingBLR Foundation



Introduction

Here are some interesting facts and random puzzles for you to consider.

Which are the top three Indian cities that contribute the most by way of corporate tax and income tax?

In a country where jobless growth is making headlines, guess the city that has created the maximum number of prime jobs over the last decade.

Delhi, Mumbai and Bengaluru today are the top three aviation hubs. But guess which one has grown the fastest over the last decade.

Which city has added more mall space in the last five years than Delhi NCR, Hyderabad, Pune, Chennai and Kolkata put together?

Of course, you know which Indian city has the best weather and the worst traffic. But do you also know which one has the highest share of young people in its population, offers the best job market for freshers and also the highest salaries for blue-collar workers?

No points for guessing which city leads in the

number of unicorns, soonicorns, startups, techies and funding. But guess the city that hosts the highest number of workshops and meetups.

Which Indian city leads in Airbnb listings, electric scooters and per capita passport, and ranks among the top two for highest share of night movie shows (perhaps a proxy for safety)?

Now guess the city that ranks consistently among the top three on virtually all important socio-economic-consumer indicators in India. And yet, it isn't officially a metro or categorised as a tier-I city?

It is data insights and nuggets like these that our annual data report on India's top cities reveal. This report, in the making over the last 12 months, focuses on India's top cities, with Bengaluru in sharp focus. The intent is to bring in a more informed, nuanced and data led understanding of India's top cities. It is meant for policy makers, bureaucrats, experts and corporate executives, but it is also meant for lay persons curious about Indian cities.

Why do we need this report, you may ask.

Here's a counter question. Which city do you want to live and work in? Isn't that a question that we (both individuals and corporates) often confront in an increasingly peripatetic world?

Cities are often the most common geographical frame that people use to make both personal and professional decisions. Even more so in a rapidly-urbanising fast-growing India, where cities have become the prime economic engine, holding out hope for better jobs, more wealth and a good life.

This growth surge is altering the status quo and infusing new dynamism in the socio-economic-cultural landscape of Indian cities. However, these growth shifts are in sharp contrast to the sclerotic governance structure of our cities. This is made worse by our archaic data infrastructure. Unsurprisingly, you find yourself confronting dichotomous scenarios, where migrant workers and corporates are voting with their feet, moving cities, while government records show you a bygone era, out of sync with reality.

Well, how else can you explain a city like Bengaluru, which ranks among top three in virtually all economic indicators, not qualifying as a metro or even a tier-I Indian city. Tragically, policy making is often happening in a data vacuum.

However, it isn't just Bengaluru's problems. In India's federal set up, cities have been given the short shrift. Political, electoral and administrative near-orphans, they do not get the attention they deserve. From China to the US, London to New York, city mayors—equipped with financial and administrative powers—play a pivotal role in shaping their city's destinies. India is a different story, where they neither have the authority nor the funds to steer their city's future. This has serious implications, as urbanisation intensifies the wave of migration underway in India.

It was with this on our mind that we started work on this data report. Five broad pillars shaped its framework.

One, we wanted to offer a rounded, 360-degree view of our cities, because our personal and professional decisions are often shaped by a complex set of factors. Think of how job opportunities, personal safety (especially for women), weather, cost of real estate, long commute and even night life have shaped our decisions.

Two, we wanted the report to have a scholarly rigour, but we also wanted it to be visually appealing and accessible to the average user. It is for this reason we conceptualised the report in an easily accessible graphic-led format.

Three, we were keenly aware of the challenges ahead of us, thanks to the lack of current, robust and credible government data on cities. Hence, we worked hard to circumvent those challenges and find innovative ways to capture current trends and patterns from alternative data sources like satellites and digital platforms.

Four, given the mandate of UnboxingBLR Foundation—a not-for-profit platform focused on Bengaluru city—we wanted this report to have a special focus on Bengaluru city.

Five, even as we intend this report to be an annual exercise, we would like to experiment with alternative data sources, try new formats of data narratives every year.

In a data scarce country, the report has leaned on multiple data sources to draw out trends and insights on India's top cities. It has analysed multiple sources of government data: from obvious, full datasets like the Census to sample surveys like the National Family Health Survey (NFHS), niche datasets like formal-sector employment from Employees' Provident Fund Organization (EPFO) to vehicle registrations from Vahan and air-travel data from Airports Authority of India (AAI), to name a few.

We also reached out to various outfit and domain experts who are large repositories of

credible data like Cushman & Wakefield for office space, Tracxn and Zinnov for tech and startups, and Qness for blue-collar employment. The full list of such partnerships can be seen at the end of the book.

In an era where digitisation wave is sweeping virtually every aspect of our lives, many internet businesses—especially those that are clear leaders in their respective spaces—capture a lot of data on various behavioural facets. Much of this never reaches the public domain. We struck partnerships to tap into such private city-level data to draw insights. For example, BookMyShow for entertainment and Spinny for second-hand car transactions. Goes without saying, all concerns around data privacy and confidentiality were maintained.

Lastly, we tapped credible independent studies and sources—in India and overseas—that had done work at the city level.

The report examines data on Bengaluru, and India's top cities, through 4 principal prisms.

Comparison with other cities

How does Bengaluru compare with 6 other Indian cities—Delhi NCR, Greater Mumbai, Chennai, Hyderabad, Kolkata and Pune—on various dimensions that define a city and shape quality of life for its citizens?

Comparison with itself

How has Bengaluru changed on these various dimensions in the past decade or so?

Shortcomings and challenges

Where does Bengaluru trail other cities, in particular Delhi NCR and Greater Mumbai? And what challenges does Bengaluru need to surmount to further its ascent?

Bengaluru as a global tech hub

How does Bengaluru compare with 12 other leading startup ecosystems in the world?

This report has been put together with the help of How India Lives—a data analytics and business intelligence outfit founded by business journalists. Our idea was not just to present raw data, but also draw inferences from it and string it together into larger, credible narratives. The data-report is divided into 6 chapters: Consumer, Economic, Demographic, Livability, Tech and Global. Each captures different aspects of India's top cities. Often, we found innovative ways to draw out meaningful insights and inferences. For example, we used tier-1 office space added by each city as a proxy for the number of prime jobs created in these cities in the past decade.

Execution was easy. And yet it wasn't. Having a partner like How India Lives ensured that we had tight control over data rigour and objectivity. But we faced many setbacks that we hadn't anticipated. For example, initially, we were very upbeat on stitching up multiple data partnerships with startups, but unfortunately, many did not materialise for varied reasons, despite their initial promise. We lost precious time in this.


In some cases, we faced more technical challenges. For example, we wanted to tap into satellite data to understand our cities and how they have evolved over decades. Late during the book, Professor PG Diwakar, ISRO Chair Professor at the National Institute of Advanced Studies, generously devoted time to work with us on this. Some of that work we hope to build on in subsequent versions of this data report. Likewise, with internet businesses.

Despite these challenges, the report has come together well. We are proud to present this to you. We hope it will enrich our perspectives on India's top cities in important ways. We look forward to building on this further in 2025.

Malini Goyal
CEO, UnboxingBLR Foundation



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The Consumer View



♥ Trading Up

Bengaluru is only the fifth-largest Indian city in population. This, naturally, places limits on it as a market for spending of an essential nature. But in several areas that feed consumer spending of a non-essential nature, Bengaluru is punching way above its population weight.

Digitally savvy

#1 Airbnb listings



#2 Zomato listings



#1 Share of food orders on Eatfit



#1 Share of second-hand cars bought on Spinny

#2 Crypto trading on CoinSwitch



#2 Transactions per capita on PhonePe



Bengaluru #1

Creating prime jobs



Adding more prime mall space



Passports per capita

Increase in savings deposits



Electric scooters

Addition of new domestic air routes



Average housing loan outstanding

Bengaluru #2

New 4-wheeler registrations



New 2-wheeler registrations

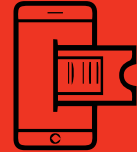
Electric cars and charging infrastructure



Average increase in house prices



Average cost of a movie ticket



Bengaluru #3

All bank loans taken by individuals



Housing loans

Mall space, within touching distance of Greater Mumbai



Luxury car sales



Domestic air passengers, within touching distance of Greater Mumbai



International air passengers



Mutual fund investments

Film shows available

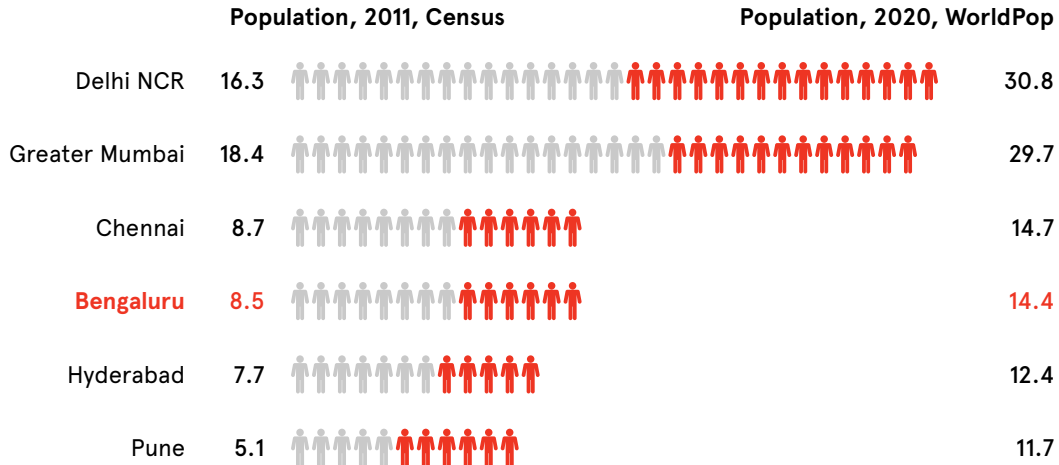


Bengaluru has...



...grown steadily in population, like all cities. The evolution of its consumer persona is another thing.

Among our set of 7 cities, Bengaluru is #5 in population (about 14.4 million in 2020) and population growth (average of 6% per year between 2011 and 2020). But as the following pages show, its prolific services sector-led growth in the past two decades has made it a magnet for well-earning professionals and lifted its consumer profile manifold.



Note: 1. Data for 2011 at an urban agglomeration level. Data for 2020 is at an urban agglomeration by sum of relevant districts. 2. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Mumbai: Mumbai, Mumbai Suburban, Thane, Palaghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy. 3. Kolkata has been excluded here as its base districts had large rural populations. Source: Census, WorldPop

Bengaluru has...

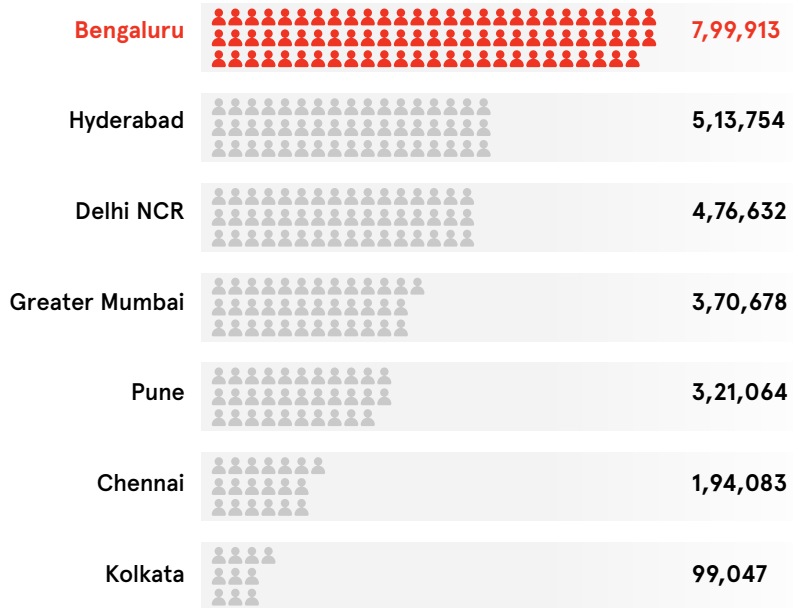


...created more new jobs of the kind that boosts top-end consumption and feeds the growth of other services.

Estimated number of prime jobs added between 2014 and 2023

= 10,000 jobs

Between calendar 2014 and calendar 2023, Bengaluru saw an increase of about 80 million sq ft in top-end office space that was occupied. Assuming 100 sq ft is required to seat one person, that's an addition of about 800,000 new prime jobs—the most by any city in this period.



Note: Data here pertains to 'Grade A' office buildings, which have large floor plates, better efficiencies and are equipped with essential facilities, including 100% DG back-up and HVAC provisions. Often, such buildings are developed by prominent developers and boast of modern amenities, thereby attracting a good tenant profile.

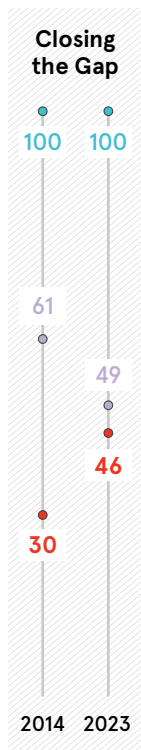
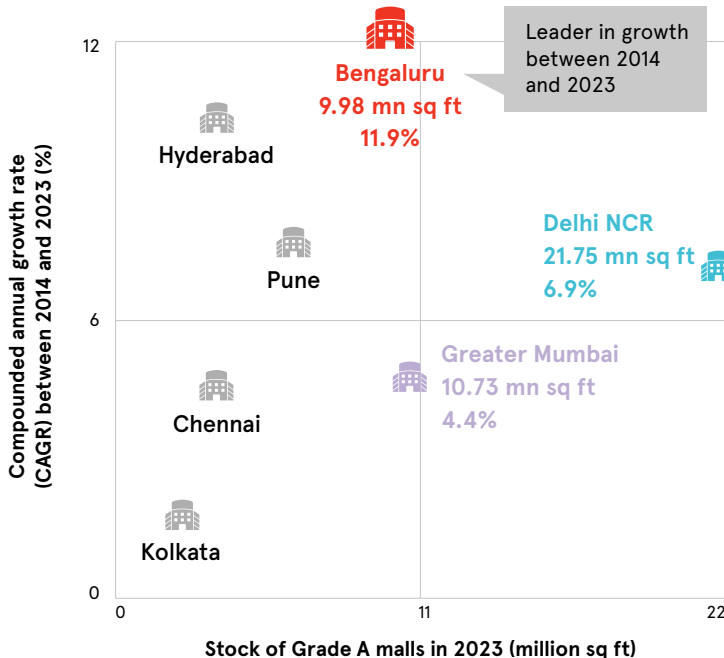
Source: How India Lives calculation based on office-space data from Cushman & Wakefield

Bengaluru has...



...led Indian cities in adding prime mall space since 2014. That pace has brought it within touching distance of Greater Mumbai for the #2 spot.

'Grade A' mall space is reflective of consumption at the top-end. Between 2014 and 2023, this prime category of shopping space in Bengaluru has expanded nearly three times.



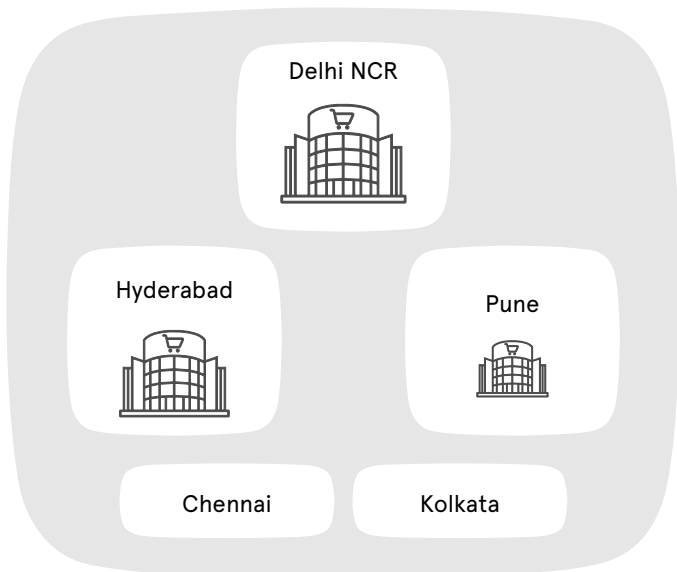
Note: Data pertains to 'Grade A' malls, which run purely on a leasing model, with limited component of sale, thereby restricting the number of owners. This enables the landlord in efficient building lifecycle management—planning of the layout, modern zoning strategy, and superior upkeep of facilities. Grade A malls foster experiential retail, a concept sought by multinational or large domestic brands in their quest for better positioning of the brand to customers. Source: Cushman & Wakefield

Bengaluru has...



...added more prime mall space in the last 4 years than Delhi NCR, Pune, Hyderabad, Chennai and Kolkata combined.

Bengaluru new mall space added in last 4 years



Grade A mall space added between 2019 and 2023 (million sq ft)

Bengaluru	4.25
Delhi NCR	1.86
Pune	1.56
Hyderabad	0.63
Chennai	0.00
Kolkata	0.00
Greater Mumbai	1.53

Note: Data pertains to 'Grade A' malls, which run purely on a leasing model, with limited component of sale, thereby restricting the number of owners. This enables the landlord in efficient building lifecycle management—planning of the layout, modern zoning strategy, and superior upkeep of facilities. Grade A malls foster experiential retail, a concept sought by multinational or large domestic brands in their quest for better positioning of the brand to customers.

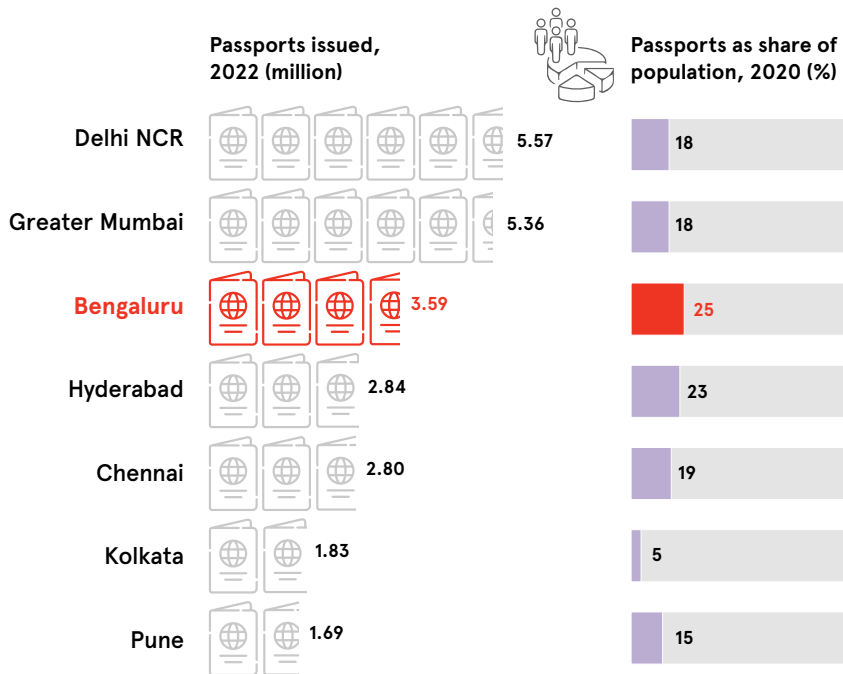
Source: Cushman & Wakefield

Bengaluru is...



...ranked third among Indian cities by passports issued. However, on a per capita basis, it leads in passport ownership.

A passport is a sign of mobility and purchasing power potential. As of 2022, India had 95.8 million passport holders, of which, 3.59 million were from the two Bengaluru districts. This means that roughly a quarter of its residents had a passport—the highest share among our set of 7 cities.



Note: 1. Count of passports issued as of December 8, 2022. 2. Population for 2020. 3. Data at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Mumbai: Mumbai, Mumbai Suburban, Thane, Palaghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy. Source: Lok Sabha question, 2022; WorldPop

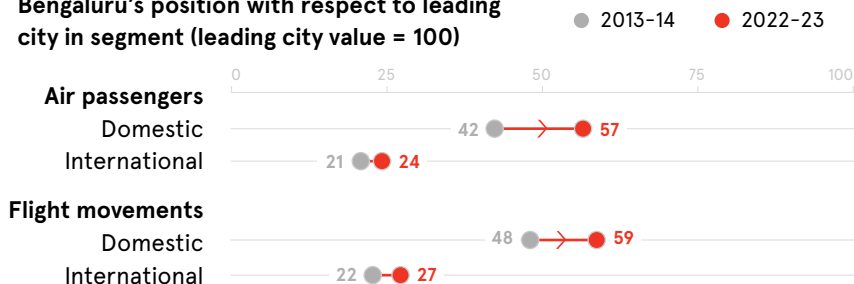
Bengaluru has...



...gained ground in both aviation segments. On domestic passenger traffic, it's within touching distance of Mumbai.

In 2013-14, Bengaluru's domestic air passenger traffic was near Kolkata and Chennai. Today, it's within touching distance of #2 Mumbai, which has endured capacity issues. Behind Bengaluru's growth are the engines of services sector-led employment and migration. A new terminal in 2023 also gives it a capacity boost.

Bengaluru's position with respect to leading city in segment (leading city value = 100)



Domestic passengers (million)

	Delhi	Mumbai	Bengaluru	Hyderabad	Kolkata	Chennai	Pune
2013-14	24.2	21.9	10.2	6.2	8.3	8.4	3.5
2022-23	49.7	32.7	28.1	17.6	15.8	13.7	7.9
Growth (%)*	8.3	4.6	11.9	12.3	7.4	5.7	9.4

International passengers (million)

	Delhi	Mumbai	Bengaluru	Hyderabad	Kolkata	Chennai	Pune
2013-14	12.7	10.3	2.6	2.4	1.8	4.5	0.1
2022-23	15.7	11.2	3.8	3.4	2.0	4.9	0.1
Growth (%)*	2.4	0.9	4.1	3.8	1.2	0.8	3.8

Source: Airports Authority of India

*9-year average annual growth (%)

Bengaluru has...



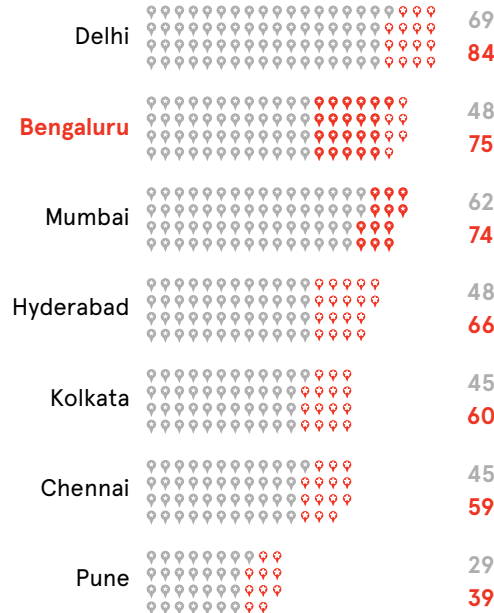
...added the most domestic air routes in 5 years and is now next only to Delhi in routes serviced, in a marker of geographically diversified demand.

Bengaluru has added 27 domestic air destinations between 2017-18 and 2022-23, leapfrogging Hyderabad and Mumbai in the process. Further, of the top 15 domestic routes in India, Bengaluru features in 4, including #2 and #3.

Number of domestic destinations

● 2017-18

● 2022-23



Top 15 route pairings in India by passengers in 2022-23



Passengers (million)

Mumbai-Delhi	5.6
Bengaluru-Delhi	4.5
Bengaluru-Mumbai	3.7
Delhi-Srinagar	2.8
Delhi-Kolkata	2.7
Delhi-Hyderabad	2.6
Delhi-Pune	2.5
Mumbai-Dabolim	2.3
Mumbai-Chennai	2.1
Delhi-Ahmedabad	2.1
Delhi-Chennai	2.0
Delhi-Dabolim	2.0
Mumbai-Ahmedabad	1.8
Bengaluru-Hyderabad	1.8
Bengaluru-Kolkata	1.7

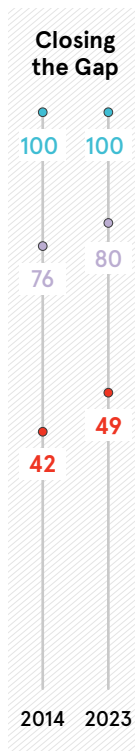
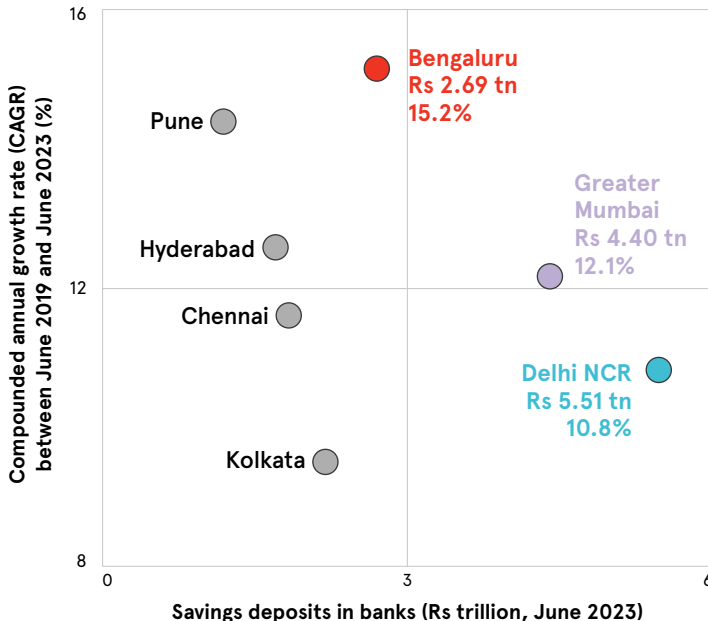
Source: Directorate General of Civil Aviation

Bengaluru has...



...seen the total amount in bank savings accounts—which tends to largely belong to individuals—increase the most in the past 4 years.

Another area where the brisk additions to formal-sector jobs and office space in Bengaluru rubs off is the increase in amounts lying in savings bank accounts, earning paltry interest. This implies incremental earnings. As a result, Bengaluru is also closing the gap to Delhi NCR and Greater Mumbai.



Note: Data at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Mumbai: Mumbai, Mumbai Suburban, Thane, Palaghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram and Tiruvallur. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy. Source: Reserve Bank of India

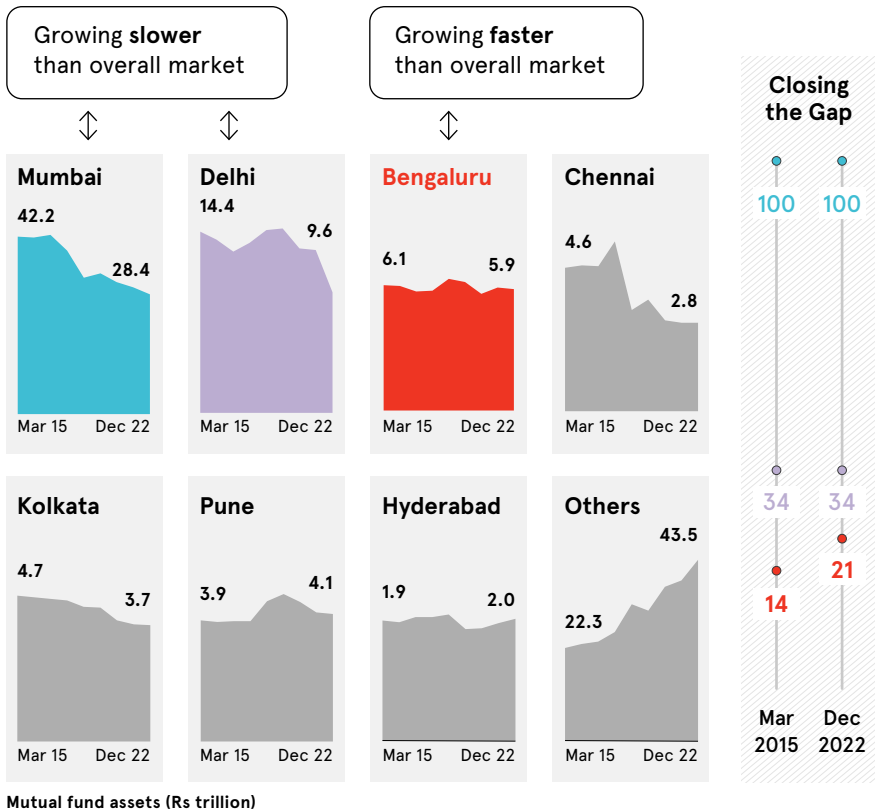
Bengaluru has...



...held on to market share better than Mumbai and Delhi, in an expanding market, where smaller cities and towns are investing more.

Small cities and towns have led the march in mutual fund assets from Rs 10 trillion in March 2015 to Rs 50 trillion now. In this expanding market, while leaders Mumbai and Delhi have lost share, Bengaluru's faster growth has enabled it to hold on its 6% share—and reduce the gap to them.

Note: Scales differ in each graph.
Source: Securities and Exchange Board of India.



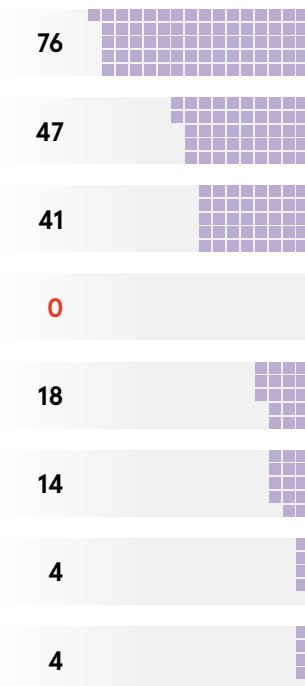
Bengaluru had...



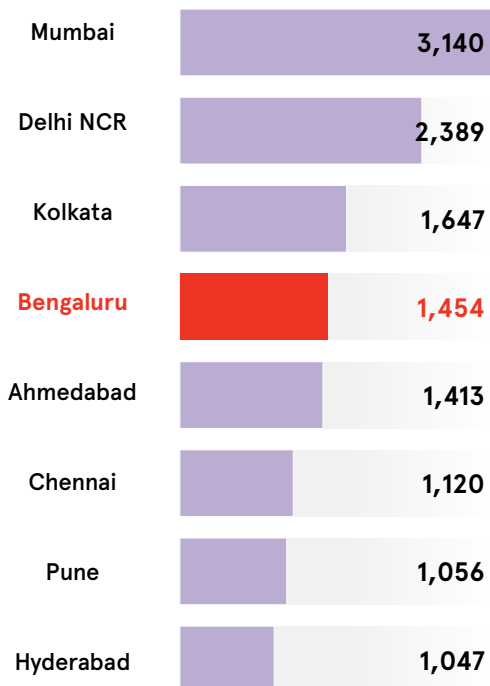
...barely caught the attention of investor-servicing businesses at the beginning of the 20th century. Now, it's a key market.

In investing, demat accounts are akin to a bank account. These are opened and maintained by depository participants (DPs), who started coming of age in the late-90s and early-2000s. Not one is headquartered in Bengaluru. Yet, in a sign of Bengaluru's recent surge as an investing market, it is number four in terms of DP service centres.

DPs by city of registration



DP service centres



Note: Cities arranged in descending order of count of DP service centres.
Source: National Securities Depository Limited (NSDL)

Bengaluru is...



...#3 in bank loans taken by individuals, after Greater Mumbai and Delhi NCR.

Bengaluru is a clear #3 in bank loans taken by individuals to buy houses, consumer durables and meet other personal spending needs. Among the 7 cities, Greater Mumbai and Hyderabad have seen the biggest surges in retail loans in the past 5 years.



Note: Data at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Mumbai: Mumbai, Mumbai Suburban, Thane, Palghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy.

Source: Reserve Bank of India

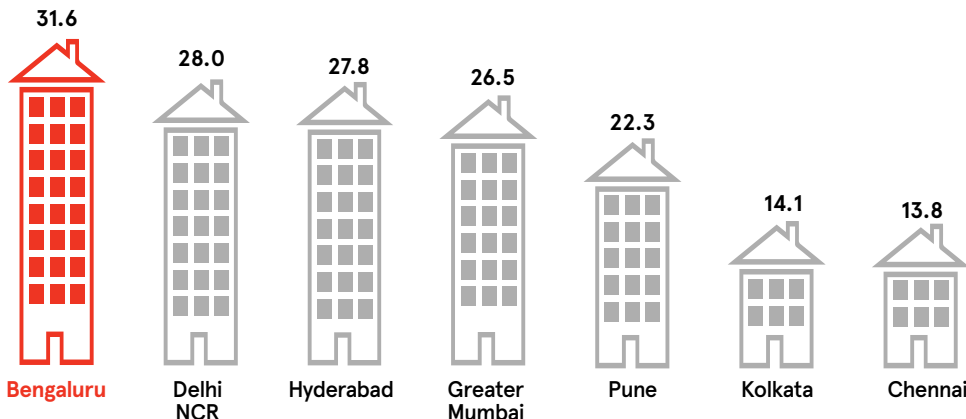
Bengaluru is...



...#3 in home loan outstanding. But in average loan amount, it leads all cities, reflective of its service class and greater leaning to all-white deals.

As of March 2023, Bengaluru had Rs 1,41,560 crore outstanding in housing loans, about 41% behind Greater Mumbai and a shade behind Delhi NCR. But in five years, its average loan outstanding per account has increased from Rs 22.6 lakh to Rs 31.6 lakh, which is the highest among the 7 cities.

Average home loan outstanding per account, March 2023 (Rs lakh)



Note: Data at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Mumbai: Mumbai, Mumbai Suburban, Thane, Palaghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy.

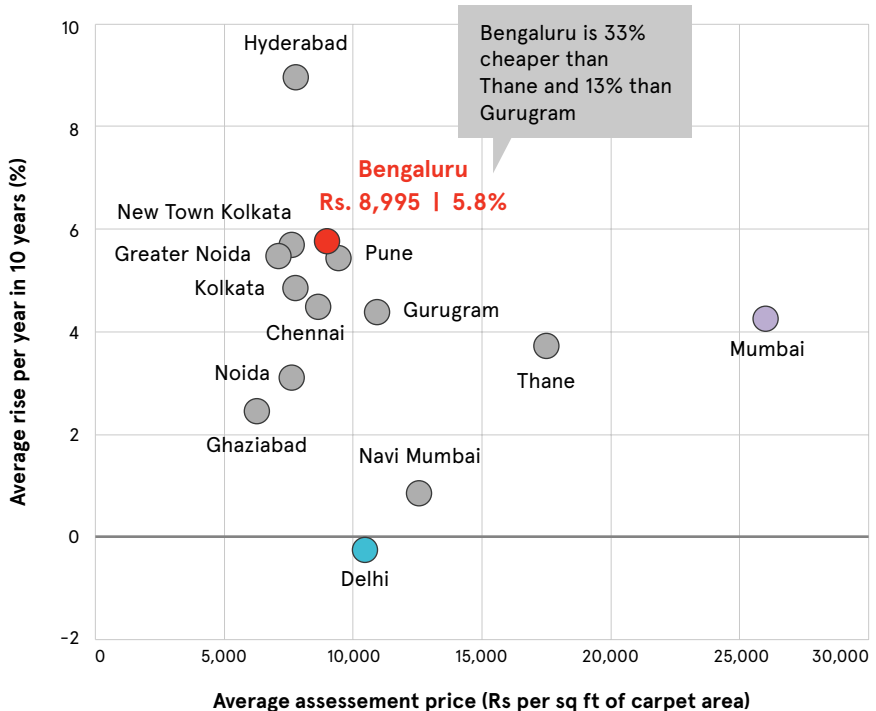
Source: Reserve Bank of India

Bengaluru is...



...#2 in average increase in house prices in the past decade, but remains more affordable than Greater Mumbai and Delhi NCR.

In the 10 years to September 2023, Bengaluru delivered the second-best average annual return in housing among 14 markets considered here, after Hyderabad. Further, on average assessment prices, it is in the middle—more affordable than Delhi NCR, Greater Mumbai and Pune.



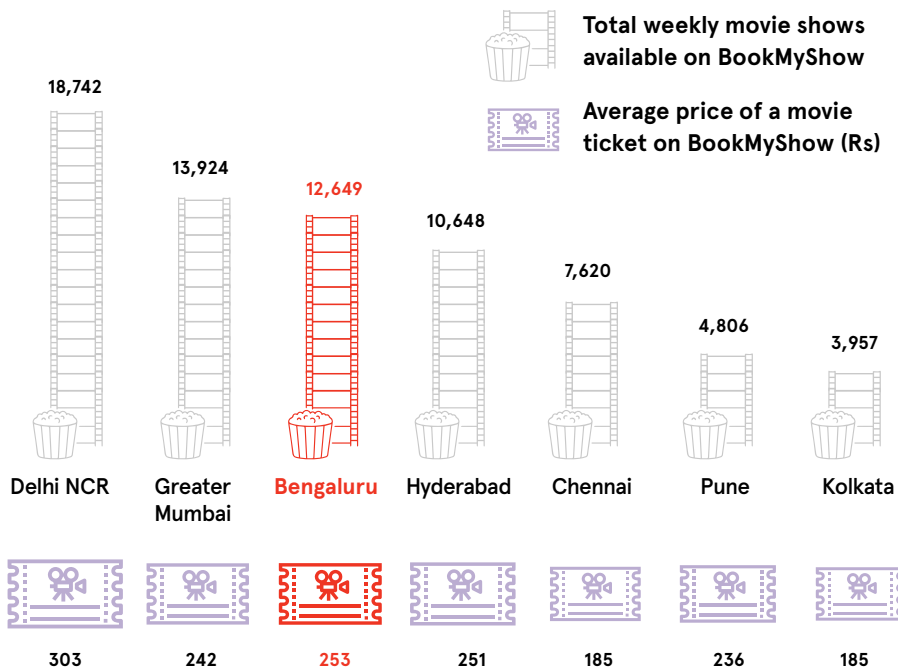
Note: Data for quarter ended September 2023.
Source: National Housing Bank (NHB) Residex

Bengaluru is...



...#3 in number of film shows available on BookMyShow, but it is #2 in most-expensive ticket prices, suggesting willingness to spend.

On average, Bengaluru offers about 1,800 movie shows in a day. That's the third-most, after Delhi NCR and Greater Mumbai. However, in what is a measure of the extent of premium pricing, the average cost of a movie ticket in Bengaluru was next only to Delhi NCR.



Note: Weekly data for the week of January 15-21, 2024.

Source: BookMyShow

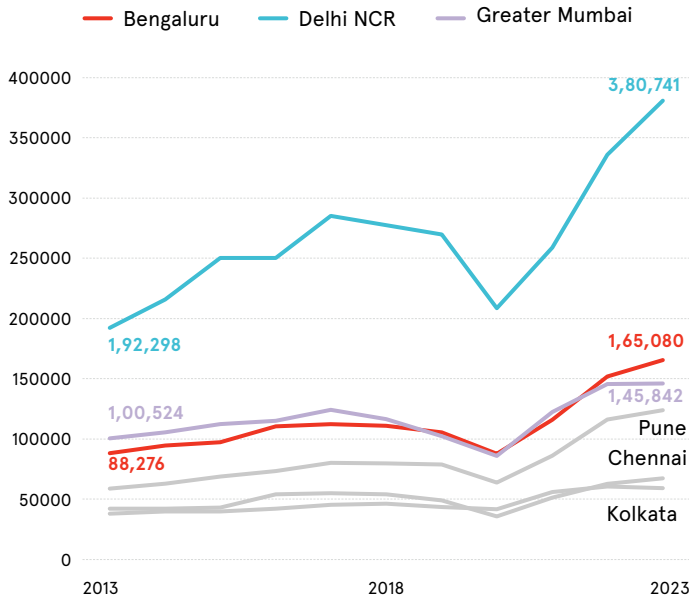
Bengaluru has...



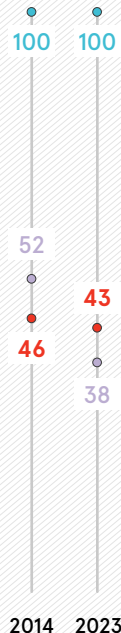
...overtaken Mumbai and is now a clear number #2 in new car registrations. Delhi NCR remains #1, more than twice the size of Bengaluru.

New 4-wheeler registrations

In the past decade, Bengaluru has been the third-fastest growing car market in our set, after Pune and Delhi NCR. As a result, it has leapfrogged Greater Mumbai and opened up distance for the first time. The distance to Delhi NCR, which is twice as big a car market, remains.



Closing the Gap



Note: 1. Data at an urban agglomeration level by sum of relevant districts. Delhi NCR: Delhi, Gurugram, Faridabad, Ghaziabad. Mumbai: Mumbai City, Mumbai Suburban, Thane, Palaghar, Raigad and Navi Mumbai. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, North 24 Parganas, South 24 Parganas, Hugli and Howrah. 2. Vahan data for Hyderabad not available.

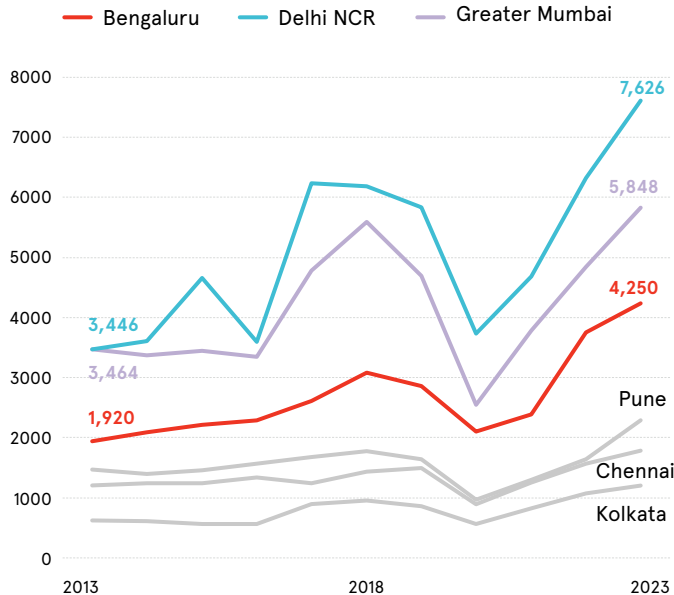
Source: Vahan, Ministry of Road Transport & Highways

Bengaluru has...



...seen brisk growth in luxury car sales post-pandemic, enabling it to close in on Greater Mumbai for the #2 spot.

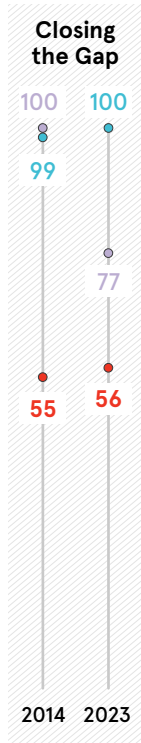
New luxury-car registrations



Two cities have sailed past their pre-pandemic highs in luxury car sales: Delhi NCR and Bengaluru. They are also the fastest-growing in the past decade, enabling Bengaluru to bridge the distance to Greater Mumbai.

Note: 1. Data at an urban agglomeration level by sum of relevant districts. Delhi NCR: Delhi, Gurugram, Faridabad, Ghaziabad. Mumbai: Mumbai City, Mumbai Suburban, Thane, Palghar, Raigad and Navi Mumbai. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, North 24 Parganas, South 24 Parganas, Hugli and Howrah. 2. Vahan data for Hyderabad not available.

Source: Vahan, Ministry of Road Transport & Highways

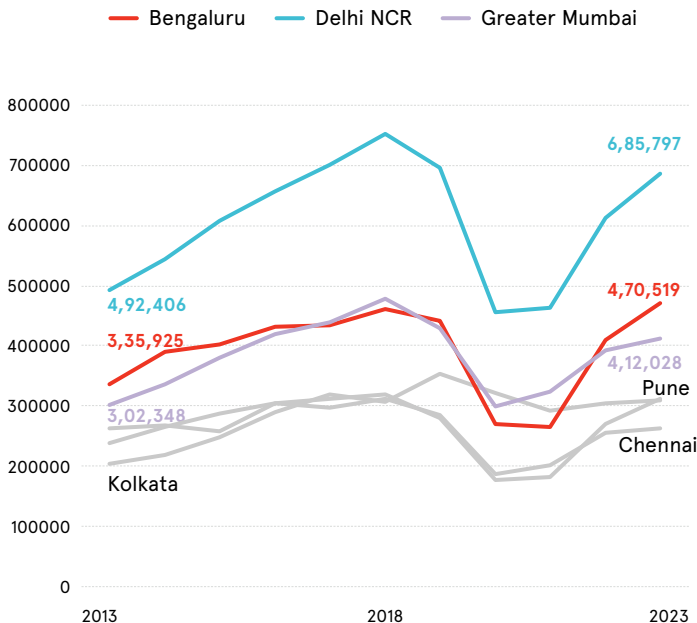


Bengaluru has...



...overtaken Mumbai and is now a clear #2 in 2-wheeler registrations. Among the top 3, it's the only one to cross pre-pandemic levels.

New 2-wheeler registrations



Before the pandemic, Bengaluru and Greater Mumbai ran neck and neck for the second spot. In 2023, Bengaluru surged ahead, partly aided by its leadership position in electric scooters.

Closing the Gap



Note: 1. Data at an urban agglomeration level by sum of relevant districts. Delhi NCR: Delhi, Gurugram, Faridabad, Ghaziabad. Mumbai: Mumbai City, Mumbai Suburban, Thane, Palghar, Raigad and Navi Mumbai. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, North 24 Parganas, South 24 Parganas, Hugli and Howrah. 2. Vahan data for Hyderabad not available.

Source: Vahan, Ministry of Road Transport & Highways

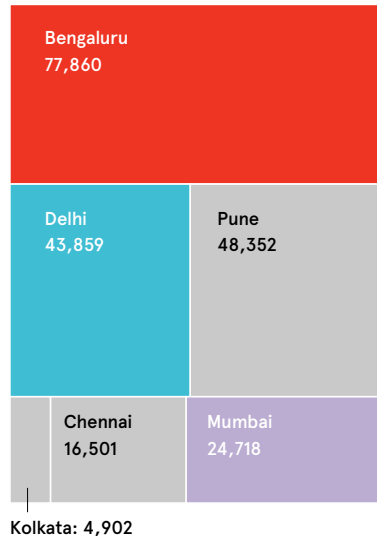
Bengaluru is...



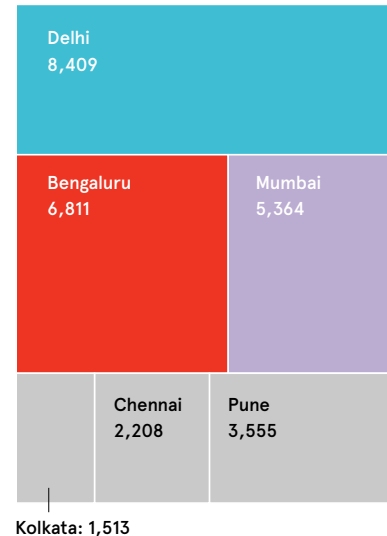
...the clear #1 in electric scooters and #2 in electric cars, indicating its leadership position in early adoption of a new technology.

An electric vehicle is a marker of change. In the segment's very early days, Bengaluru is a leading adopter. It is #1 in two-wheelers. In four-wheelers, it closely trails only Delhi NCR, which is twice as large a car market. Bengaluru's leadership in EVs is in spite of Delhi NCR having far more public charging stations.

Electric two-wheelers
Registrations in 2023



Electric cars
Registrations in 2023



Note: 1. Data at an urban agglomeration level by sum of relevant districts. Delhi NCR: Delhi, Gurugram, Faridabad, Ghaziabad. Mumbai: Mumbai City, Mumbai Suburban, Thane, Palaghar, Raigad and Navi Mumbai. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, North 24 Parganas, South 24 Parganas, Hugli and Howrah. 2. Vahan data for Hyderabad not available.
Source: Vahan, Ministry of Road Transport & Highways

Bengaluru is...



...#2 in second-hand car transactions done through online platform Spinny as well as in average transaction value.

Bengaluru matches Delhi NCR in share of purchases of second-hand cars from leading online platform Spinny. And its buyers spent the second-most, on average, on their purchases.

Share of city in car transactions on Spinny (%)

Purchases

Sales



20



16

Bengaluru

6.47



20



24

Delhi NCR

5.96



12



11

Hyderabad

6.43



11



9

Pune

5.66



8



8

Chennai

6.08



8



10

Mumbai

6.57

Source: Spinny

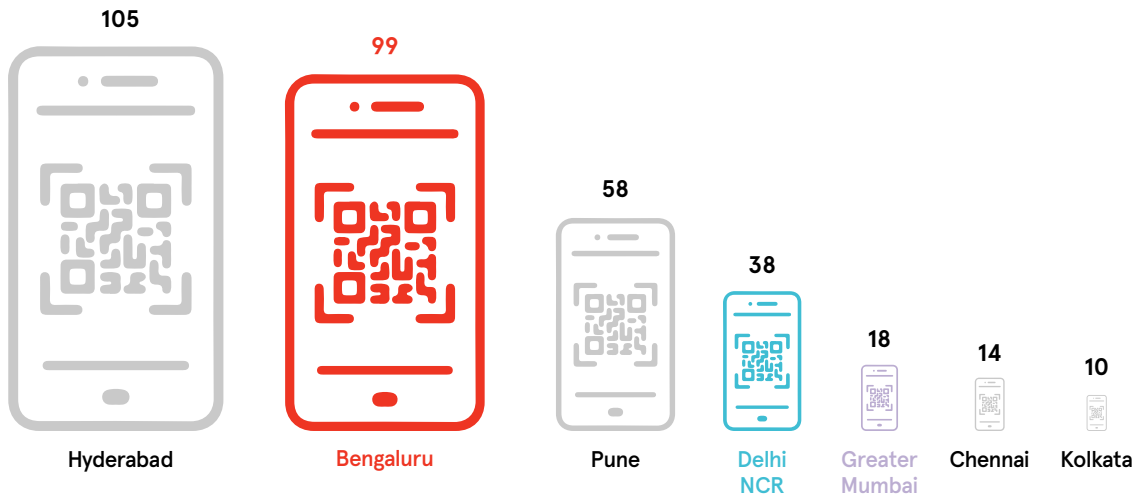
Bengaluru is...



...#2 in digital payment transactions per capita, after Hyderabad, which has grown the fastest in this space in the last 5 years.

Hyderabad and Bengaluru are markedly above other cities on digital payments via PhonePe. On a per capita basis, Bengaluru is doing about five times the payment that Greater Mumbai does.

PhonePe transactions per capita in October–December 2023



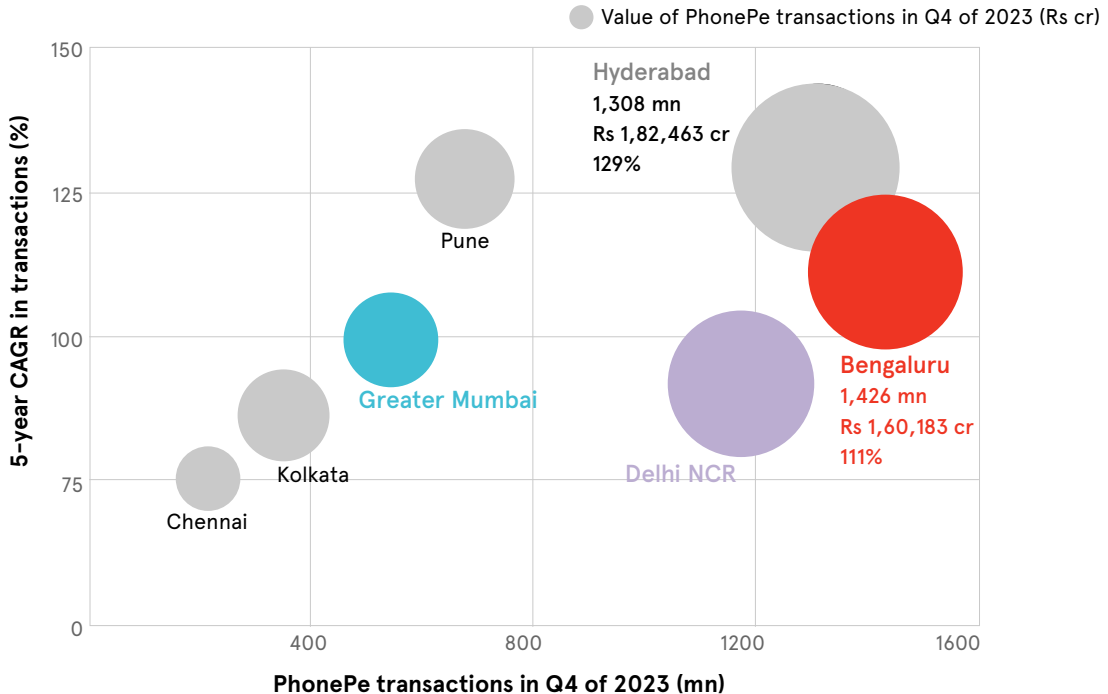
Note: 1. PhonePe data includes unified payments interface (UPI), cards and wallets. 2. Population data for 2020.
Source: PhonePe; WorldPop

Bengaluru is...



...#1 in digital payment transactions. But it is #2 to Hyderabad in growth over a 5-year period and value of transactions.

In Q4 of 2023, Bengaluru recorded 1.43 billion payment transactions done via PhonePe—the most among the 7 cities. But in value terms, Hyderabad was ahead of Bengaluru by about 14%.



Note: PhonePe data includes unified payments interface (UPI), cards and wallets.
Source: PhonePe

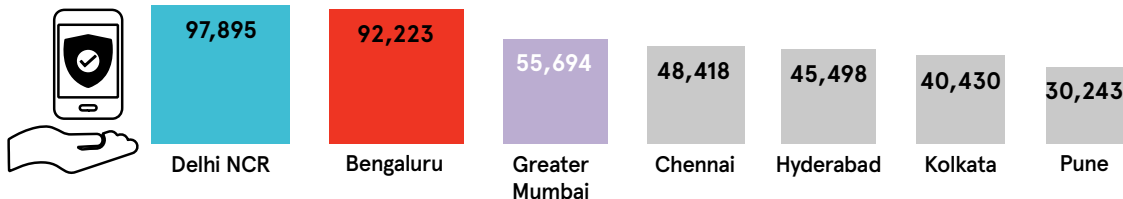
Bengaluru is...



...a close #2 in insurance policies bought digitally. It trails only Delhi NCR, whose population is nearly twice that of Bengaluru.

In another example of digital adoption, Bengaluru recorded about 92,000 insurance policies sold via PhonePe in Q4 of 2023—the second most among our 7 cities. Of the top 10 pincodes, 5 are from Bengaluru.

Insurance policies bought via PhonePe



Top 10 pincodes

560068	Bengaluru (Bommanhalli, Kudlu, Begur, Madivala, Singasandra)
560037	Bengaluru (Marathahalli, Kundalhalli, Brookefield)
560043	Bengaluru (Banaswadi, Kalyan Nagar, HRBR Layout, Hennur Gardens)
560076	Bengaluru (Bannerghatta Road, Hulimavu, JP Nagar VIII Phase, IIM Bangalore)
411057	Pune (Hinjawadi, Wakad)
500072	Hyderabad (Kukatpally)
201301	Noida (Sector 16, 18, 63)
560078	Bengaluru (JP Nagar, Kothanur)
122001	Gurugram (Civil Lines, Mini Secretariat, South City 1)
110059	Delhi (Uttam Nagar, Vikas Nagar)

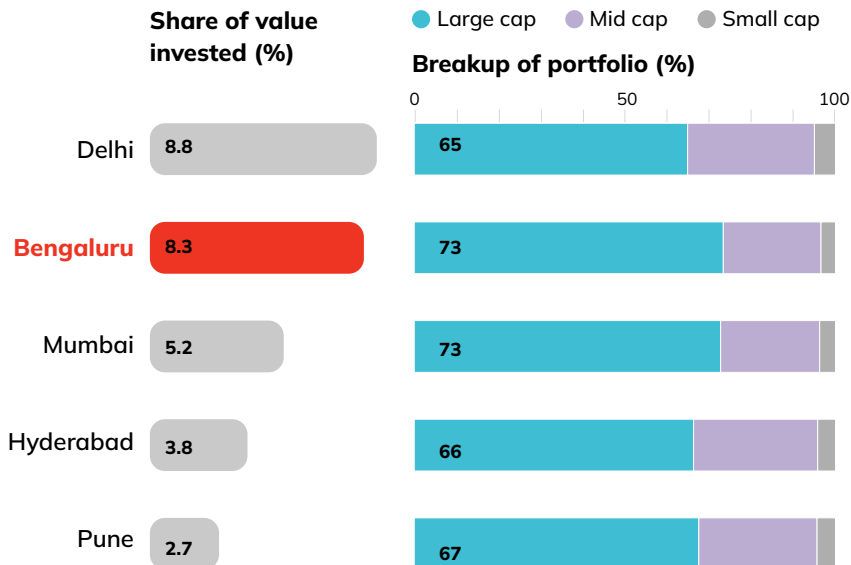
Source: PhonePe

Bengaluru is...



...India's number two city in crypto investing, and its investors tend to lean more towards large coins than other cities.

In 2023, among Indian cities, Bengaluru followed Delhi in share of value invested in crypto-currencies via CoinSwitch. Adjusted for population, Bengaluru would leapfrog Delhi. Further, Bengaluru's crypto investors showed a greater preference for large coins, which are considered to be lower on the risk scale.



Notes: 1. Small cap: coins up to \$100 million; Mid cap: Coins between \$100 million and \$1 billion; Large cap: Coins above \$1 billion. 2. Data for 2023. 3. Cities arranged in descending order of share.

Source: CoinSwitch

Bengaluru has...



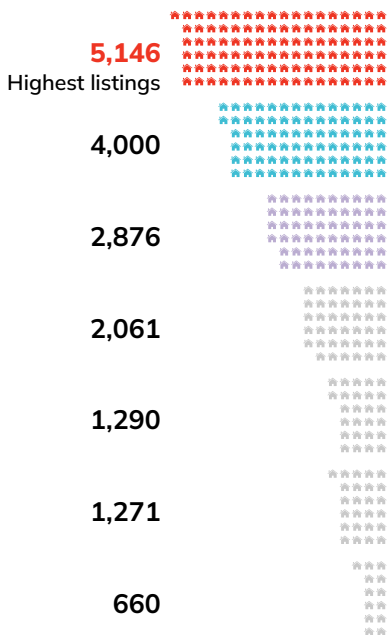
...more active Airbnb listings than any other Indian city, one indication of how it's a vanguard of the new economy.

Bengaluru is a digital city. And its residents are young—and seek supplementary incomes by leveraging the digital economy. Despite not leading on tourist numbers, Bengaluru leads on property listings on Airbnb, though its average revenues per property are the lowest.

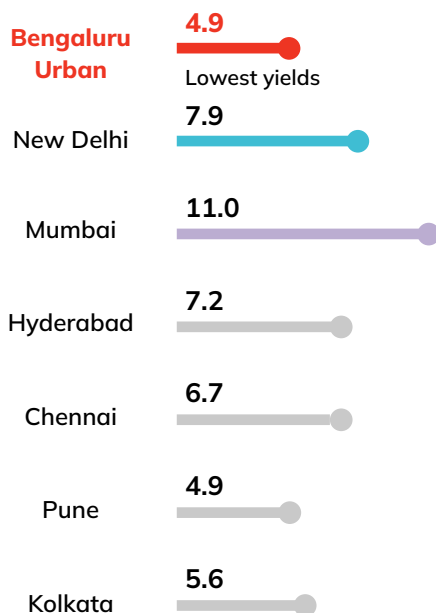
Source: AirDNA.co

Active property listings on Airbnb, November 2023

= 50 listings



Median revenue earned by an Airbnb property in 12-month period to November 2022 (Rs lakh)



Bengaluru is...



...in the top 2 in adoption of diverse online businesses like food delivery and food ordering, and second-hand car purchases and sales.

Residents of Bengaluru are active in transacting online. The city is second only to Greater Mumbai in restaurant listings on Zomato. It leads in share of orders placed on Eatfit. Likewise, in second-hand car purchases from Spinny.



	Food delivery (Zomato)	Food ordering (Eatfit)	Second-hand car sales and purchases (Spinny)	
	Number of restaurants listings	Share of orders on platform (%)	Share of city in car purchases (%)	Share of city in car sales (%)
Bengaluru	11,416	26	20	16
Chennai	5,768	7	8	8
Delhi NCR	8,485	21	20	24
Greater Mumbai	13,224	16	8	10
Hyderabad	8,987	12	12	11
Kolkata	5,698	NA	NA	NA
Pune	8,847	9	11	9
Bengaluru rank	2	1	1	2

Note: 1. Cities arranged in alphabetical order. 2. Spinny and Eatfit don't operate in Kolkata.

Source: Zomato, Spinny, Eatfit

Bengaluru is...



...in the top 2 in how far consumers are willing to go in their online journey.

On second-hand car platform Spinny, more than any other city, Bengaluru consumers bought cars without a test drive and while adopting the online inspection mode. Similarly, on food ordering platform Eatfit, it is number two in share of users on a mealplan subscription.



Second-hand car sales and purchases (Spinny)

Food ordering (Eatfit)

	Share of cars bought tokened/paid fully without a test drive: Relative ratio	Adoption of online inspection mode (within eligible base): Relative ratio	Share of users on mealplan on own platform (%)
Bengaluru	1.35	1.12	31
Chennai	0.85	0.96	30
Delhi NCR	1.00	0.93	19
Greater Mumbai	1.00	0.93	29
Hyderabad	0.85	0.98	32
Pune	0.80	1.09	28
Bengaluru rank	1	1	2

Note: 1. Cities arranged in alphabetical order. 2. Spinny and Eatfit don't operate in Kolkata. 3. 'Relative ratio' captures the city's value relative to the India average for Spinny.

Source: Spinny, Eatfit



unb♥xingBLR



Chapter 2

unb♥xingBLR

The Economic View



Photo: Shylendrahoode, iStock



The Services Code

Riding the engines of IT-ITES services and startups, Bengaluru has established itself as a key Indian city in the services space. While it continues to make ground on that front, it is dwarfed by the longer track record and economic diversity of Delhi NCR and Greater Mumbai.

Where Bengaluru matches, even tops,
Delhi and Mumbai...



Creating prime
service-sector jobs



Services
exports



Attracting, and
remunerating,
blue-collar workers



Foreign direct
investment



Income tax paid by
individuals



Formal-sector
employment



Top-grade office
space

Attracting women
blue-collar
workers



Income tax paid
by companies



New company
formation

..and where it doesn't



Manufacturing and trading enterprises



Micro, small and medium enterprises



Informal-sector employment



Goods exports



Listed companies



Width in wealth creation in public markets



Bank credit to non-individuals



Entities above Rs 5 crore turnover paying GST

Bengaluru has...

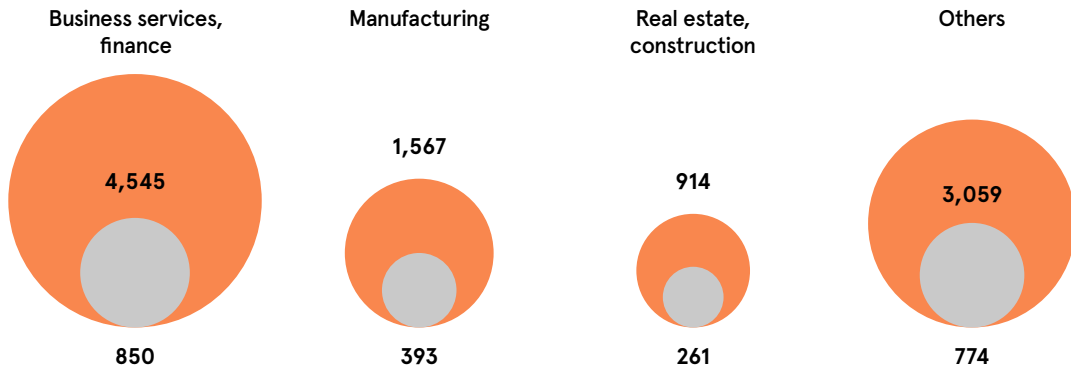


...always been a services-oriented city. In the past decade, it's also seen a marked scale up in new business interest in other sectors.

Along with services, Bengaluru is also growing in other sectors. In the past decade, while the number of new companies formed in business services and finance has increased 5-fold, new company formation in manufacturing and real estate too registered solid increases.

Number of new companies formed in Bengaluru by sectors

● 2012-13 ● 2022-23



Note: 1. Data at an urban agglomeration level by sum of relevant districts (Bengaluru Urban and Bengaluru Rural). 2. Others includes trading, agriculture and allied, among several others.

Source: Ministry of Corporate Affairs

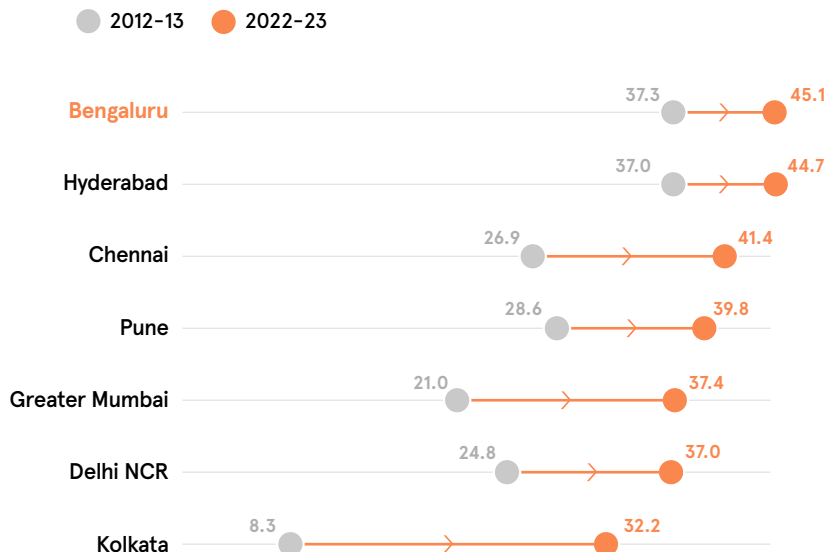
Bengaluru was...



...always a service-oriented city. While that has only deepened in the past decade, other cities too are seeing the services sector increase its share.

Over the past decade, all cities have seen a greater share of companies being formed in business services or finance. Even in 2012-13, Bengaluru was the leader, with 37% of new companies formed in the city operating in this space. It remained the leader in 2022-23 also, with a 45% share.

Share of business services, finance in new companies formed in city (%)



Note: 1. Data at an urban agglomeration level by sum of relevant districts. Delhi NCR: Delhi, Gurugram, Faridabad, Ghaziabad. Greater Mumbai: Mumbai City, Mumbai Suburban, Thane, Palaghar, Raigad and Navi Mumbai. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, North 24 Parganas, South 24 Parganas, Hugli and Howrah. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy.

Source: Ministry of Corporate Affairs

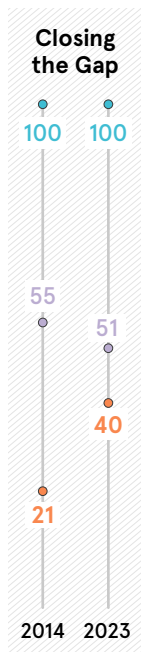
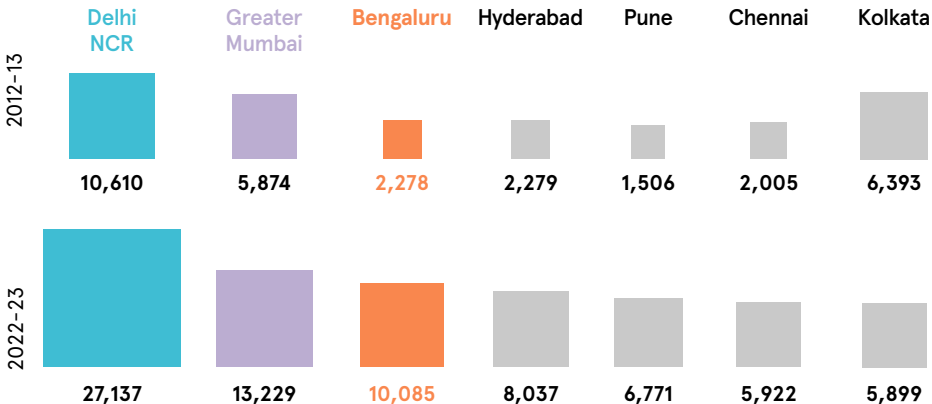
Bengaluru has...



...risen from #5 in 2012-13 in number of new companies formed to #3 in 2022-23, reflecting a thriving spirit of entrepreneurship.

In the past decade, Bengaluru has grown the second fastest, after Pune, in terms of setting up new companies. This has helped it close the gap to Delhi NCR and Greater Mumbai. Against one company formed in Bengaluru for every five in Delhi NCR in 2012-13, two companies were formed here in 2022-23.

Number of new companies formed



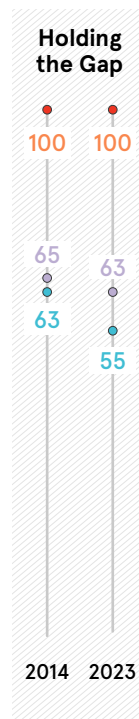
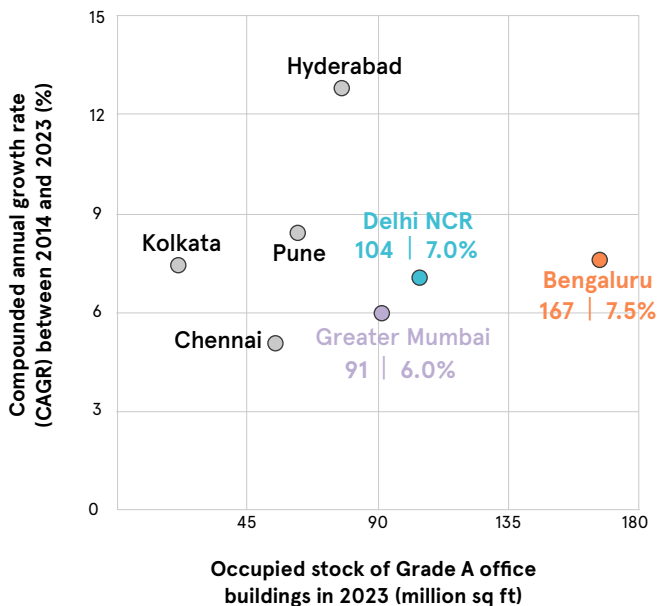
Note: 1. Data at an urban agglomeration level by sum of relevant districts. Delhi NCR: Delhi, Gurugram, Faridabad, Ghaziabad. Greater Mumbai: Mumbai City, Mumbai Suburban, Thane, Palghar, Raigad and Navi Mumbai. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, North 24 Parganas, South 24 Parganas, Hugli and Howrah. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy. Source: Ministry of Corporate Affairs

Bengaluru was...



...the clear leader in top-quality office space in 2014. It remained the clear leader even in 2023—successfully building on the platform it laid down.

In the past decade, Bengaluru has increased its lead over Delhi NCR as the #1 city in occupied space in 'Grade A' office buildings. In spite of being the largest, it's expanded the third-fastest, ahead of Hyderabad and Pune, significantly smaller markets. One future risk factor for Bengaluru is rents, which have grown the most in the past decade and now trail only Mumbai.



Note: Data pertains to Grade A office buildings, which refers to assets that features large floor plates, better efficiencies, and are equipped with essential facilities, including 100% DG back-up and HVAC provisions. Often, such buildings are developed by prominent developers and boasts of modern amenities, thereby attracting a good tenant profile.

Source: Cushman & Wakefield

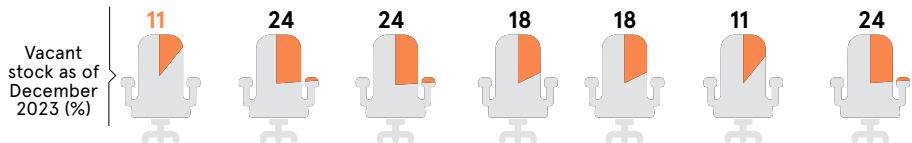
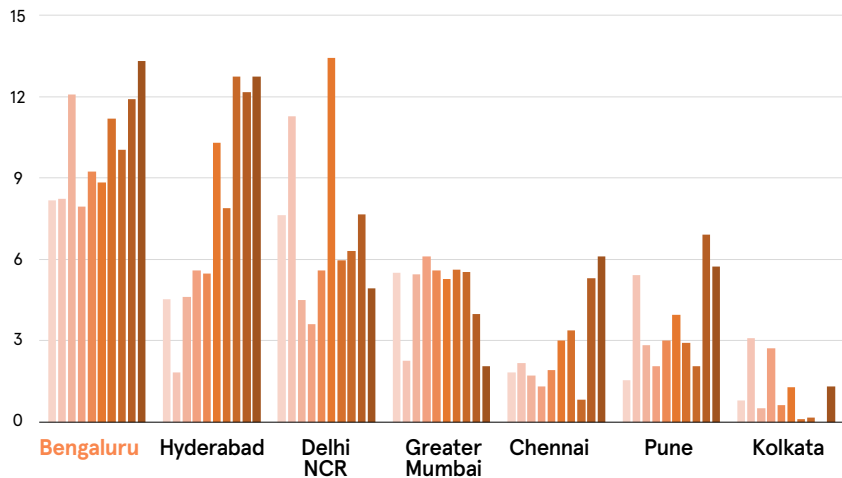
Bengaluru has...



...added more office stock than any other city in the last 5 years. In spite of that building spree, it had the lowest vacancy.

In the last 5 years, only Hyderabad has matched Bengaluru's scale of addition to Grade A office stock. But there's a crucial difference. As of December 2023, about 24% of Hyderabad's stock was vacant—the highest among these 7 markets. The lowest vacancy was in Bengaluru—11%.

New supply of Grade A office space (million sq ft) from 2014 to 2023



Note: Data pertains to Grade A office buildings, which refers to assets that features large floor plates, better efficiencies, and are equipped with essential facilities, including 100% DG back-up and HVAC provisions. Often, such buildings are developed by prominent developers and boasts of modern amenities, thereby attracting a good tenant profile.

Source: Cushman & Wakefield

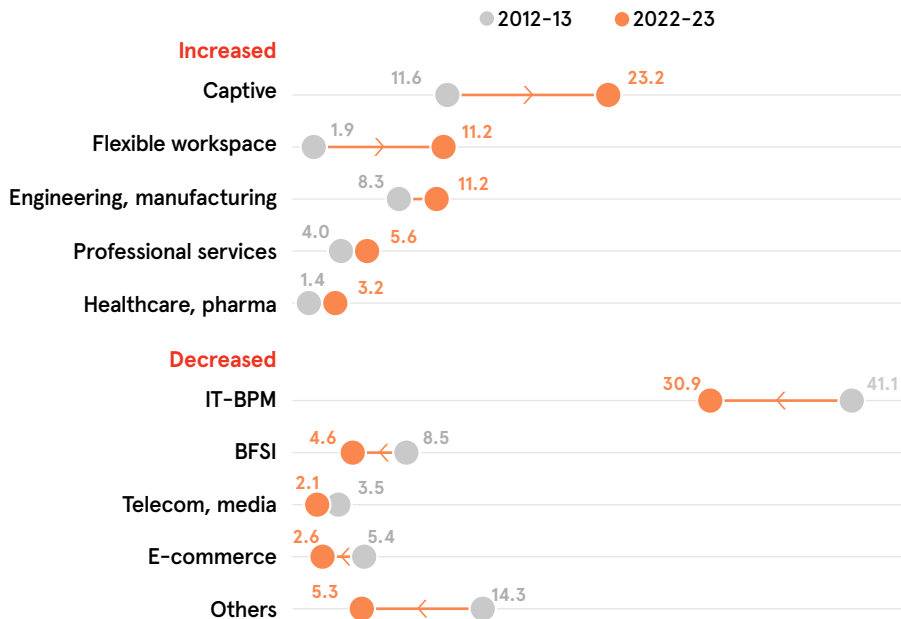
Bengaluru is...



...seeing more global companies setting up captive IT operations and an increase in the share of flexible workspace in its office space portfolio.

IT-ITES still accounts for about half of Grade A office space leased in Bengaluru, with the only change being the gains in share made by captives. Other sectors that have gained share in the last 5 years are flexible workspace, and engineering and manufacturing.

Share of gross lease volume of Grade A office space by key sectors in Bengaluru (%)



Note: Data pertains to Grade A office buildings, which refers to assets that features large floor plates, better efficiencies, and are equipped with essential facilities, including 100% DG back-up and HVAC provisions. Often, such buildings are developed by prominent developers and boasts of modern amenities, thereby attracting a good tenant profile.

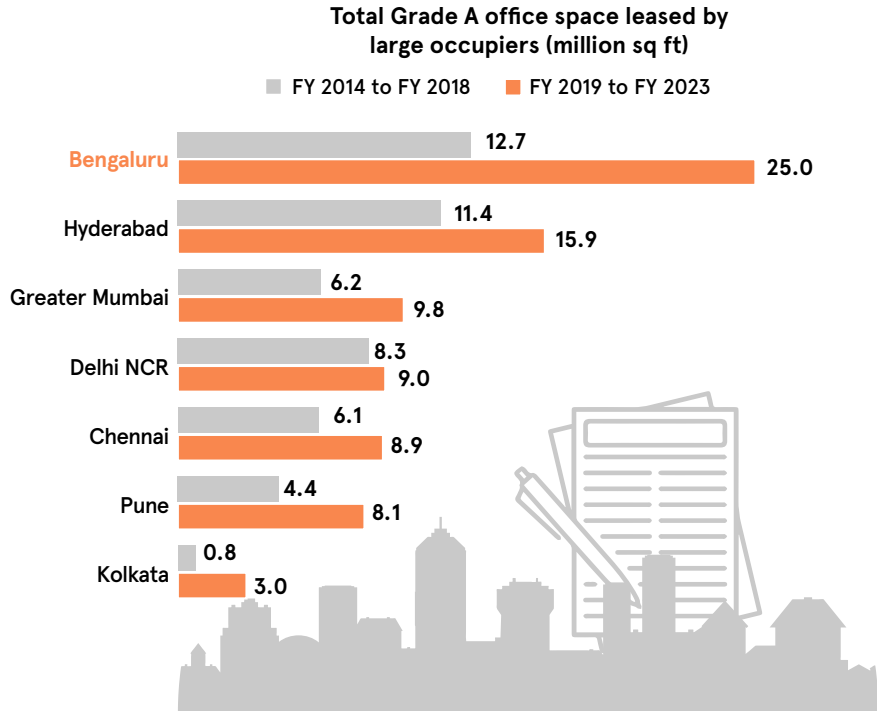
Source: Cushman & Wakefield

Bengaluru is...



...the city where the largest consumers of office space are leasing even more space, in a gesture that expresses confidence in their choice of city.

The largest of companies that lease office space—above 1 million sq ft across markets as of end-2023—have doubled down on Bengaluru. In the past 5 years, this set of 34 companies has doubled its office space in Bengaluru, with the city’s gains being the sum total of such gains in Hyderabad, Mumbai, Delhi NCR and Chennai.



Note: Data pertains to 'Grade A' office buildings (See previous page for definition). Aggregate of gross leasing volume transacted by a static list of 34 companies whose combined leasing across cities exceeded 1 million sq ft as of end-2023.

Source: Cushman & Wakefield

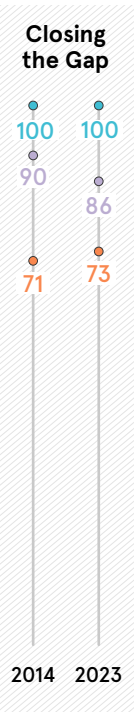
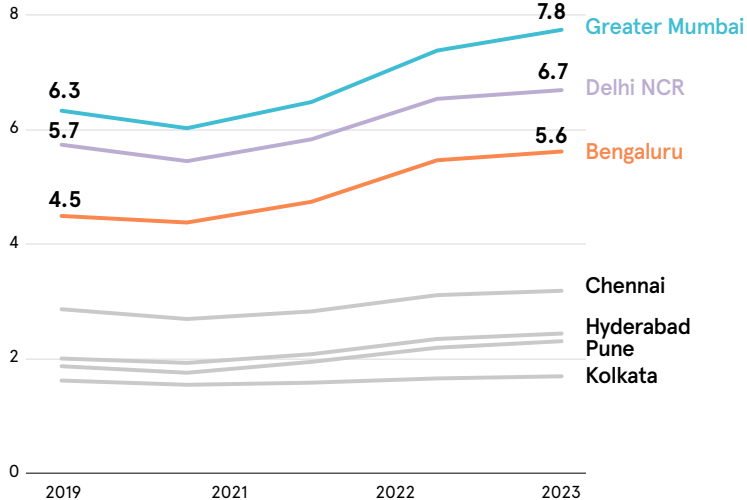
Bengaluru is...



...the #3 city in formal-sector employment, behind Greater Mumbai and Delhi NCR, and it's gaining ground.

In the last 4 years, Bengaluru has grown the fastest in adding employees in the formal sector. As a result, it has been able to close the gap to both Delhi NCR and Mumbai.

Employee count by registration city of organisation (million)



Note: 1. Data at an urban agglomeration level by sum of relevant districts (See page 48). 2. The EPFO data has limitations. An organization can be registered in Bengaluru for EPFO purposes, but its staff may be employed in other cities. For example, Infosys uses a Bengaluru registered address for all its employees. Similarly, a company can have staff working in Bengaluru, though their EPF is paid in other cities. For example, all of EPF payments of TCS and ICICI Bank are through Mumbai-registered entities, though both have staff in Bengaluru. Still, at a net level, the EPFO data is some measure of how companies registered in a city—their home base—are doing on job creation.

Source: Employees' Provident Fund Organisation

Formal Sector Employment

Bengaluru is...



...the only large formal-sector employment city that is also leading on related growth metrics.

In the past 4 years, a period separated by the covid-19 pandemic, Bengaluru has been a frontrunner on all metrics related to growth in formal-sector employment. It's #1 in both number of employees added and total amount deposited, while being near the top in count of organisations and average amount deposited.

	Number of EPF-registered employees	Number of organisations depositing EPF	EPF amount deposited	Average EPF amount deposited per employee
--	------------------------------------	--	----------------------	---

Average annual growth between 2019 and 2023 (%)

Bengaluru	5.8	1.7	17.7	9.4
Pune	5.5	1.8	17.5	11.4
Hyderabad	5.2	2.4	17.1	11.1
Greater Mumbai	5.2	-0.4	13.2	6.6
Delhi NCR	3.9	0.2	11.6	7.1
Chennai	2.7	0.5	11.5	8.1
Kolkata	1.2	0.4	10.2	7.9

Growth rank

RANK ■ 1 ■ 2 to 3 ■ 4 to 7

Bengaluru	1	3	1	3
Pune	2	2	2	1
Hyderabad	3	1	3	2
Greater Mumbai	4	7	4	7
Delhi NCR	5	6	5	6
Chennai	6	4	6	4
Kolkata	7	5	7	5

Note: The EPFO data has limitations (see note on Page 53). Cities arranged in descending order of growth in number of EPF-registered employees.

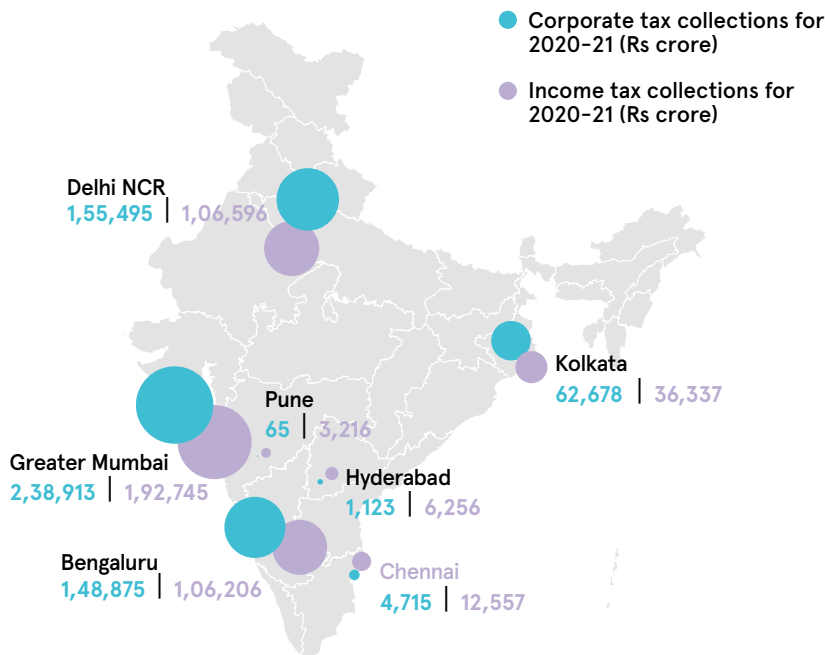
Source: Employees' Provident Fund Organisation

Bengaluru is...



...a close #3 in gross collections of both tax paid by companies and tax paid by individuals.

The zonal accounts offices that make up the 7 cities in our set account for 97% of India's gross corporate tax collections and 84% of India's gross income tax collections. In 2020-21, when the acute impact of the covid-19 pandemic was felt, Bengaluru was #3 on both counts and within touching distance of Delhi NCR.



Note: Greater Mumbai is the sum of the zonal accounts office (ZAO) of Mumbai and Thane. Delhi NCR is the sum of ZAOs of Delhi, Rohtak (Faridabad and Hissar) and Meerut (Ghaziabad, Noida and Muzaffarnagar). Bengaluru ZAO includes Mysuru, Davangere, Gulbarga and Belgaum. Hyderabad ZAO includes Tirupati, Vijaywada and Guntur. Chennai ZAO includes Puducherry. Pune ZAO includes Kolhapur and Solapur.

Source: Accounts at a Glance, 2020-21; Central Board of Direct Taxes

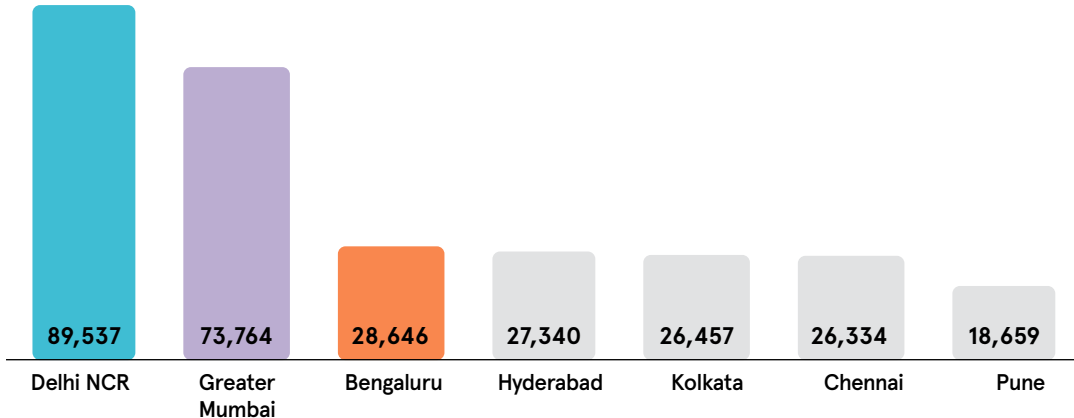
Bengaluru is...



...#3 in terms of number of entities above a certain size that were paying GST.

The count of entities whose revenues exceeded Rs 5 crore and which were paying GST in Bengaluru amounted to 32% of Delhi NCR and 38% of Greater Mumbai—which is reflective of the older economic base and greater economic width of those two cities.

Number of entities paying GST with an aggregate annual turnover of above Rs 5 crore



Note: 1. Data accessed on March 3, 2024.

Source: Goods and Services Tax E-Invoice System

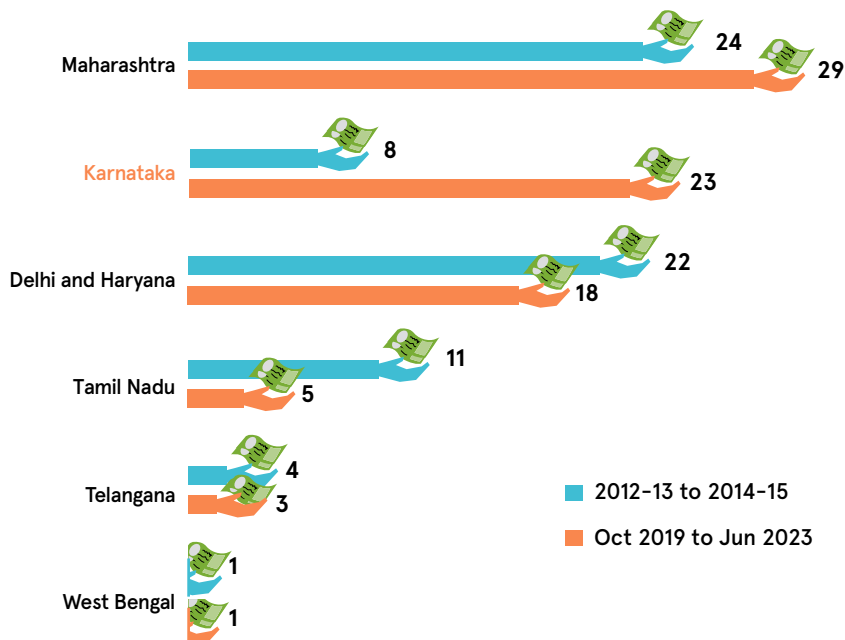
Bengaluru has...



...gone from #4 in investments by foreign companies in India to #2 in a decade, with a sizeable jump in share.

Data on foreign direct investment (FDI) is released at a state level and not at a city level. Still, given the dominating nature of large cities on Indian states, this can be seen as a proxy for foreign economic interest in cities. Between October 2019 and June 2023, Karnataka received about \$46 billion in FDI. That's a 23% share—triple of what it was about a decade ago.

Share of foreign direct investment equity inflow (%)



Note: Prior to October 2019, the government released FDI data by regional offices of the Reserve Bank of India (RBI). Hence, for example, New Delhi included Delhi, Haryana and parts of Uttar Pradesh. Since October 2019, the data is released at a state level. While due care has been taken to reconcile this definitional change, there could be a minor variance in the older period.

Source: Department for Promotion of Industry and Internal Trade

Bengaluru has...



...been consistently offering the highest salary or close to highest for blue-collar workers, male and female, in the last 5 years.

Average monthly salary (Rs)

In June 2018, for both males and females, Bengaluru was #2 in average salaries earned by Qness staff in workforce management. In June 2023, it jumped above Delhi NCR. Across cities, women employees in our data were paid less than male peers, but that gap has shrunk sizeably in this 5-year period.

		Jun 2018	Jun 2023		Jun 2018	Jun 2023
	Delhi NCR	15,352	15,863	Male workers	15,486	16,063
	Bengaluru	14,145	16,498		Female workers	12,802
	Greater Mumbai	13,145	15,480	12,495		15,554
	Pune	12,720	15,549	12,397		15,637
	Hyderabad	12,711	14,875	10,874		14,157
	Chennai	12,543	14,797	10,737		14,092
	Kolkata	11,775	14,039	11,019	13,942	

Rank

		Jun 2018	Jun 2023		Jun 2018	Jun 2023
	Delhi NCR	1	2	Male workers	1	2
	Bengaluru	2	1		Female workers	2
	Greater Mumbai	3	4	3		4
	Pune	4	3	4		3
	Hyderabad	5	5	6		5
	Chennai	6	6	7		6
	Kolkata	7	7	5	7	

Data for about 72,000 Qness Corp employees (June 2018) and about 108,000 Qness Corp employees (June 2023) in workforce management (staffing business) earning below Rs 21,000 per month. Source: Qness Corp

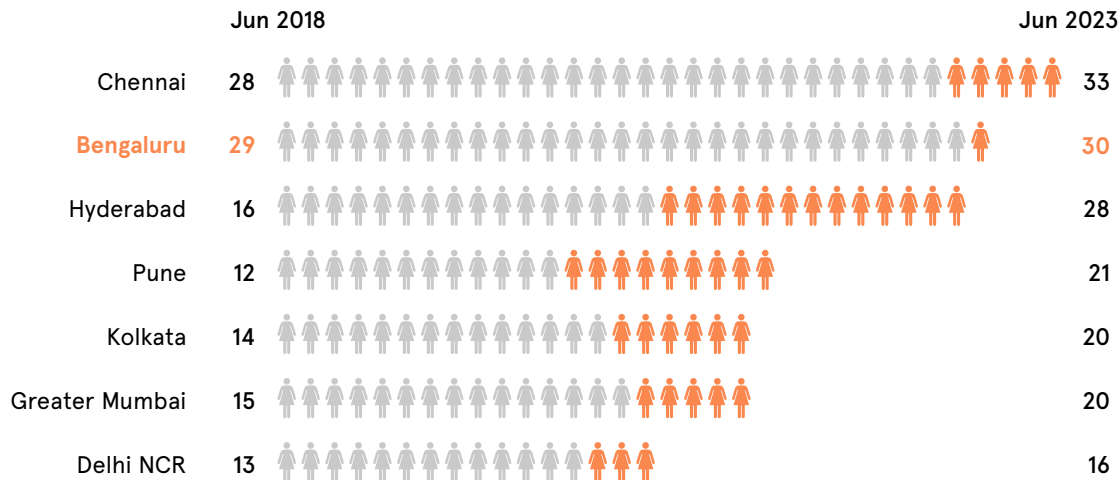
Bengaluru has...



...been drawing more women blue-collar workers, though other cities are catching up.

Among blue-collar workers on the Qness payroll, Bangalore had the highest share of women workers in June 2018, of 29%. In June 2023, it was #2, with 30%. Every city has been registering gains on this count. In June 2018, Bangalore accounted for 1 in 3 female workers on Qness payrolls. This is now 1 in 5.

Share of women in blue-collar workers on Qness payroll (%)



Data for about 72,000 Qness Corp employees (June 2018) and about 108,000 Qness Corp employees (June 2023) in workforce management (staffing business) earning below Rs 21,000 per month.
Source: Qness Corp

Bengaluru is...

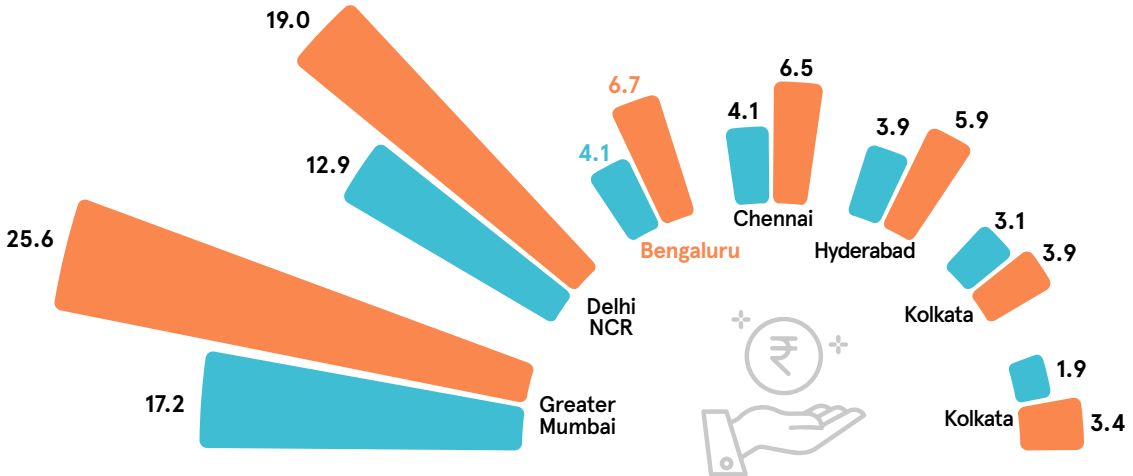


...#3 in total bank credit (institutional plus retail), but is dwarfed by both Delhi NCR and Greater Mumbai.

Bank credit is a proxy of a region's overall economic pulse, as opposed to a sectoral one. Bengaluru is #3 in total bank credit, but it is only 26% of Greater Mumbai and 32% of Delhi NCR.

Total bank credit (Rs trillion)

● Mar 2018 ● Mar 2023



Note: Data at an urban agglomeration level by sum of relevant districts. Delhi NCR: Delhi, Gurugram, Faridabad, Ghaziabad. Mumbai: Mumbai City, Mumbai Suburban, Thane, Palghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, North 24 Parganas, South 24 Parganas, Hugli and Howrah. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy. Source: Reserve Bank of India (RBI)

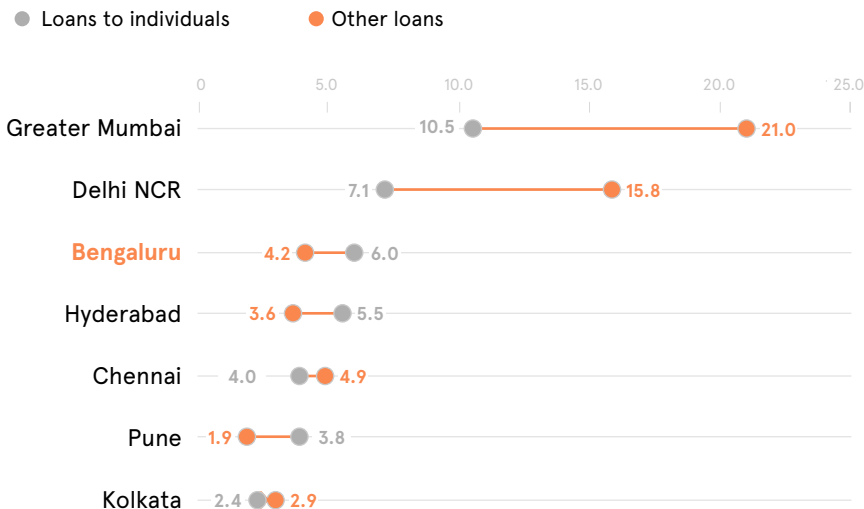
Bengaluru is...



...a heavyweight in loans to individuals, but not so much in institutional loans.

Bengaluru and Hyderabad are the only 2 cities whose share of loans to individuals exceeds its share of loans to companies. On the one hand, this shows their service-led growth. On the other, it underscores their distance to, and differences with, Delhi NCR and Greater Mumbai.

Share of all-India bank credit (%), March 2023



Note: Data at an urban agglomeration level by sum of relevant districts. Delhi NCR: Delhi, Gurugram, Faridabad, Ghaziabad. Mumbai: Mumbai City, Mumbai Suburban, Thane, Palghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, North 24 Parganas, South 24 Parganas, Hugli and Howrah. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy. Source: Reserve Bank of India

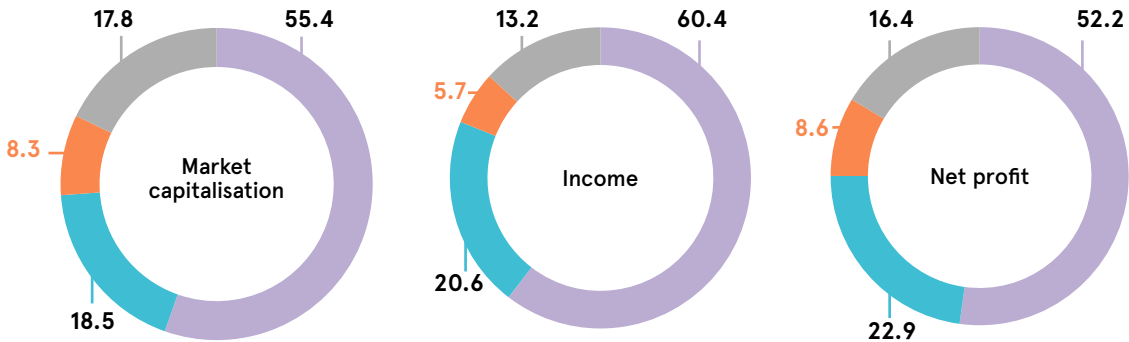
Bengaluru is...



...#3 on key metrics for listed companies, but it has huge gaps to Greater Mumbai and Delhi NCR.

The universe of listed companies shows where business capital resides. Much as Bengaluru makes a compelling case for companies to have a presence, Greater Mumbai, followed by Delhi, remain greater locators of business capital.

Share within the 7 cities (%)



● Greater Mumbai
 ● Delhi NCR
 ● Bengaluru
 ● Others

1. Data for listed companies by registered address. 2. Income and net profit for 2022-23, and market capitalization as on March 31, 2023. 3. Others comprise Pune (share of market cap: 5.9%, income: 2.9%, net profit: 4.9%), Kolkata (5.8%, 3.5%, 4.1%), Chennai (4.1%, 5.1%, 5%) and Hyderabad (2.1%, 1.7%, 2.3%).

Source: Centre for Monitoring Indian Economy (CMIE)

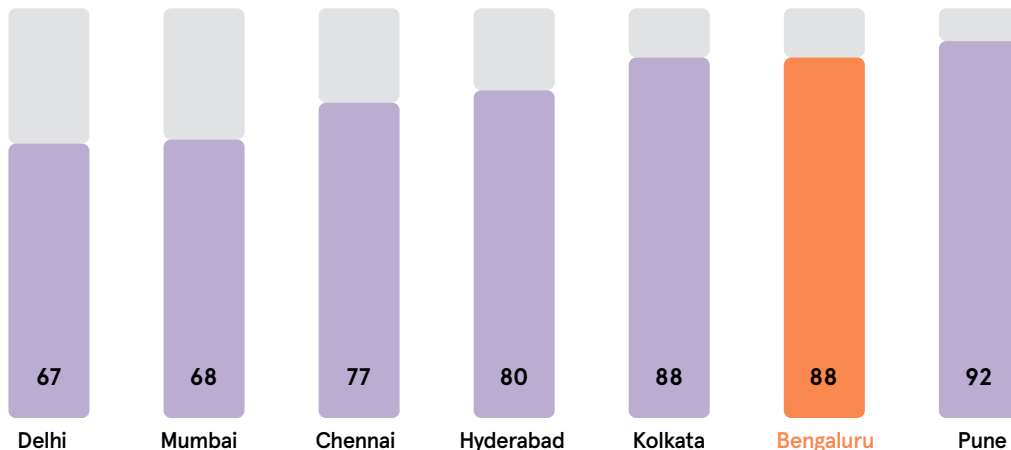
Bengaluru is...



...#3 in market capitalisation, but a small set of companies are behind much of this value.

As of March 2023, 135 companies with a Bengaluru registered address were listed on the Bombay Stock Exchange. The 20 most-valued account for 90% of Bengaluru's total market cap, underscoring one of its future challenges—to broaden wealth creation in public markets.

Share of top 20 companies in city's market cap (%) (March 2023)



Note: Data for listed companies by registered address.
Source: Centre for Monitoring Indian Economy (CMIE)

Goods Exports

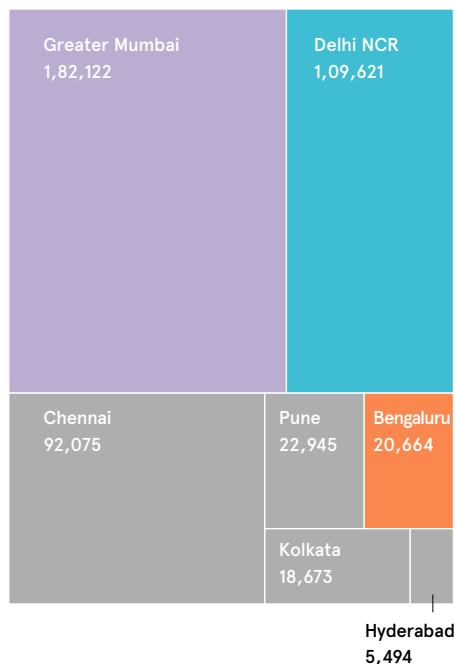
Bengaluru is...



...a leader in IT services exports. But it is a laggard in goods exports, coming in only at #5 among our set of 7 cities.

Bengaluru is a leader in IT services exports. But when it comes to goods exports, it did only about 11% of Greater Mumbai, 19% of Delhi NCR and 22% of Chennai in 2022-23. Its goods exports are led by textiles, parts of electronic, engineering and machinery, and pharma.

Goods exports in 2022-23 (Rs crore)



Bengaluru's goods exports in 2022-23 (Rs crore)

Cotton: others	5,074
Airplane parts	2,782
Medicines	2,349
Others	1,999
Electric inverters	1,389
X-ray tubes	1,099
Immunological products	855
T-shirts	833
Electronic boards	779
Knit shirts, sweat shirts	751
Pharma salts	726
Electric machinery parts	588
Engine parts	584
Revolver parts	486
Turbo jets	371

Source: Ministry of Commerce and Industry





Bengaluru is...



...#5 on number of MSMEs, highlighting a missing piece towards a well-rounded economic profile.

Be it entrepreneurship, informal employment or economic diversity, MSMEs shape these pieces in a significant way in India. While Bengaluru has built heft in the formal services sector, its count of MSMEs is only about one-third of Greater Mumbai.

Number of micro, small and medium enterprises (MSMEs)

	 Manufacturing	 Services	 Trading	 Total
Greater Mumbai	2,52,657	5,47,318	2,96,661	10,96,636
Delhi NCR	2,41,860	3,34,696	2,33,585	8,10,141
Pune	1,13,975	2,29,993	1,66,210	5,10,178
Chennai	93,374	2,43,282	86,519	4,23,175
Bengaluru	98,700	1,78,951	78,592	3,56,243
Kolkata	1,03,491	1,10,685	1,08,411	3,22,587
Hyderabad	66,768	1,44,338	64,771	2,75,877

Note: 1. Data at an urban agglomeration level by sum of relevant districts. Delhi NCR: Delhi, Gurugram, Faridabad, Ghaziabad. Mumbai: Mumbai City, Mumbai Suburban, Thane, Palghar, Raigad and Navi Mumbai. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, North 24 Parganas, South 24 Parganas, Hugli and Howrah. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy. 2. Data as of November 2023.

Source: National Data and Analytics Platform (NDAP)



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Chapter 3

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The Demographic View



Photo: Shylendrahoode, iStock



The Young City

The city of retirees has become the city of young people. And, with its growing opportunities in the IT-led services sector, it's drawing people from across India. This is also reshaping its schools and college space.



Demography

Compared to other migration hubs like Delhi and Mumbai, Bengaluru has...

- # A younger population, with the largest share in the 21-40 years age bracket
- # Significant population diversity, with good representation from multiple states
- # A more equitable gender ratio
- # High share of female literacy
- # Greater willingness of employers to hire freshers



Schools

Bengaluru is showing growth, which is being spurred by the private sector.

- # Adding schools at a fast pace
- # Outsized role of private sector in school ownership and student enrolment
- # Leader in residential schools
- # Big improvements in dropout rates



Colleges

In the last 20 years, no city has added colleges like Bengaluru has.

- # Leader in number of colleges, with nearly three-fourths set up since 2000
- # An engineering hub, followed by commerce and medical science
- # About 84% of colleges are private and don't receive government aid
- # Leader in vocational training for medical staff
- # Leader in foreign students
- # Like most cities, trails representation benchmarks for backward castes and religious minorities

Bengaluru has...

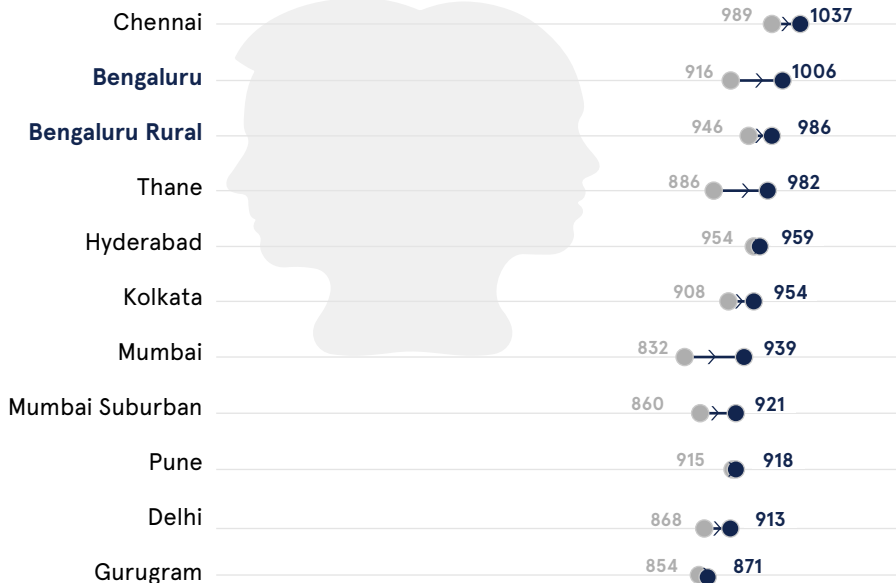


...a near equal gender split across both its districts. Among the 7 main metros, only Chennai and Bengaluru have that.

Being migratory hubs adds to cities having a gender ratio that is skewed towards males. While all 7 cities have seen an improvement in sex ratio in the past decade, Bengaluru Urban is among the bigger improvers.

Sex ratio of the total population (females per 1,000 males)

● 2011 ● 2019-20



Note: Data at district level. Districts arranged in descending order of 2019-20 values.

Source: National Family Health Survey, 2019-20; Census 2011

Bengaluru had...

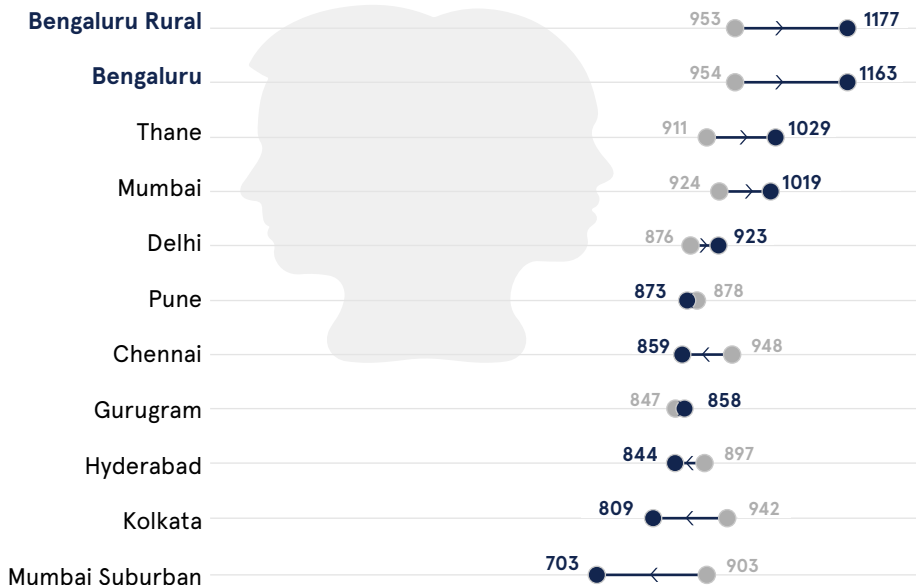


...a gender ratio at birth that was the highest among the 7 cities a decade ago. That has improved, and remains the highest.

Unlike overall population, gender ratio at birth hasn't improved across all districts in the past decade. Both Bengaluru districts are improvers, and show more girls being born than boys.

Sex ratio (females per 1,000 males)

● At age 0, 2011 ● At birth for children born in the last five years, 2019-20



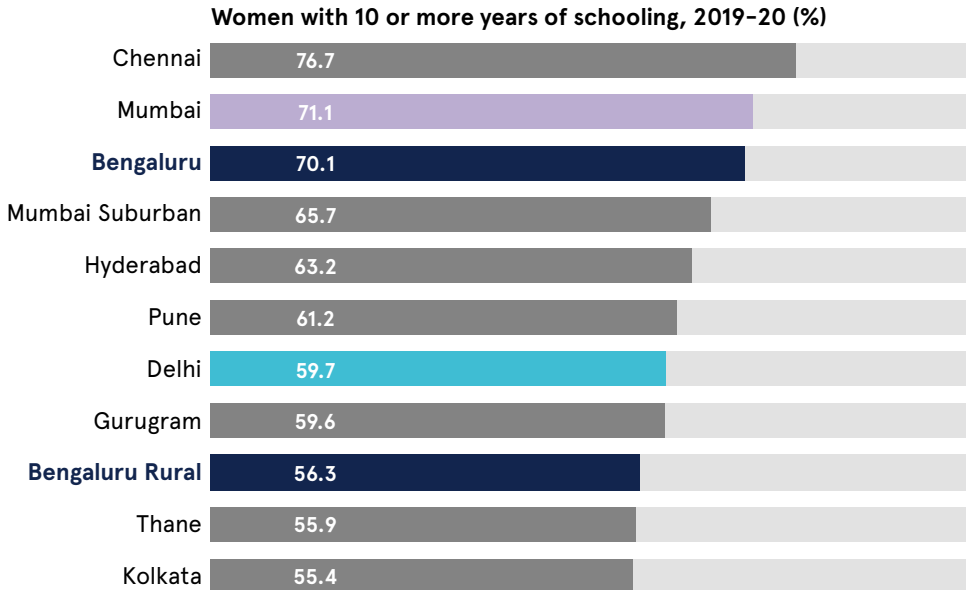
Note: Data at district level. Districts arranged in descending order of 2019-20 values.
Source: National Family Health Survey, 2019-20; Census 2011

Bengaluru has...



...about 7 out of 10 women with 10 or more years of schooling in its urban district, which is the next best to only Chennai and Mumbai.

In 2019-20, 70% of women in Bengaluru had about 10 or more years of schooling. This is an improvement from about 60% in 2011, as per the Census.



Note: Data at district level. Districts arranged in descending order of values.

Source: National Family Health Survey, 2019-20

Bengaluru is...



...inherently a young city. It has the highest share of population in both the age brackets of 19–30 years and 31–40 years.

In 2011, about 46% of Bengaluru's population was in the age bracket of 19–40 years. By comparison, Mumbai and Delhi were around 41–42%. Given the ensuing startup boom, the figure for Bengaluru is likely to have increased further.

Share of population (%)

	Up to 18 years	19 to 30	31 to 40	41 to 60	Above 60
Bengaluru	29.4	28.5	17.6	18.0	6.6
Pune	31.7	26.1	15.9	18.5	7.8
Hyderabad	34.8	25.8	16.1	17.3	6.0
Greater Mumbai	31.4	25.4	16.6	19.9	6.8
Delhi NCR	38.3	25.2	16.1	14.6	5.8
Chennai	29.2	24.0	17.2	21.7	7.9
Kolkata	31.8	23.0	16.1	21.0	8.1

Note: 1. Cities arranged in descending order of values for 19 to 30 years. 2. Data is at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Mumbai: Mumbai, Mumbai Suburban, Thane, Palghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy.

Source: Census 2011

Bengaluru had...



...been seeing brisk in-migration even a decade back, as is outlined by its distribution of population by languages spoken.

In 2011, about 47% of Bengaluru's population stated Kannada as their mother tongue. Another 14% apiece as Tamil and Telugu. And there were another 9 languages whose speakers in the city's population then exceeded 40,000.

City	Mother tongue	Share of speakers of mother tongue	Share of Urdu speakers (%)	Number of mother-tongue languages whose population in the city exceeds 40,000
Greater Mumbai	Marathi	47.4	9.4	19
Bengaluru	Kannada	47.0	11.8	12
Pune	Marathi	78.2	1.9	10
Delhi NCR	Hindi	87.6	4.8	10
Chennai	Tamil	83.7	2.6	7
Hyderabad	Telugu	43.4	43.2	5
Kolkata	Bengali	86.6	3.2	5

Note: 1. Cities arranged in descending order of total languages with population above 40,000. 3. Data is at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Greater Mumbai: Mumbai, Mumbai Suburban, Thane, Palaghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy.

Source: Census 2011

Bengaluru is...



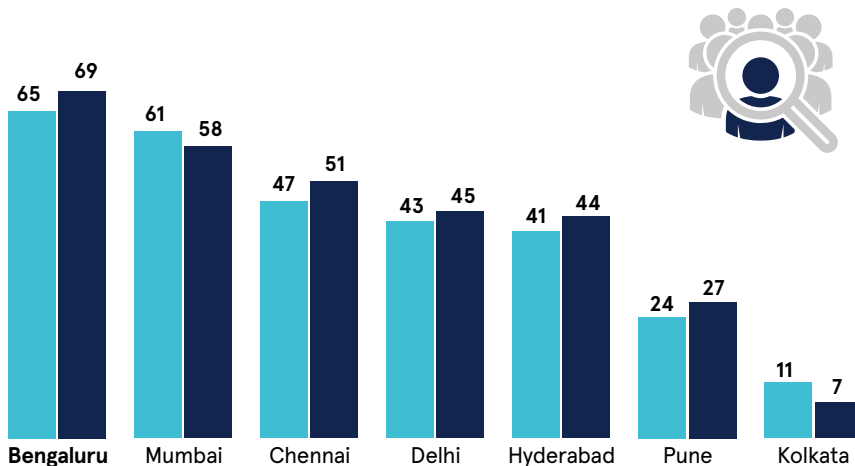
...an opportunity hotspot for freshers. A survey in mid-2023 showed a greater share of employers intended to hire freshers in 2024 than other cities.

A survey done in mid-2023 showed that nearly 7 out of 10 employers surveyed in Bengaluru intended to hire freshers in 2024.

Share of employers within city that intend to hire freshers (%)

■ July-December 2023

■ January to June 2024



Note: Data for 2024 from TeamLease survey of 377 employers carried out during July-September 2023. Cities arranged in descending order of 2024 values.

Source: TeamLease EdTech Career Outlook Report (HY1, Jan-Jun, 2024)

Bengaluru is...

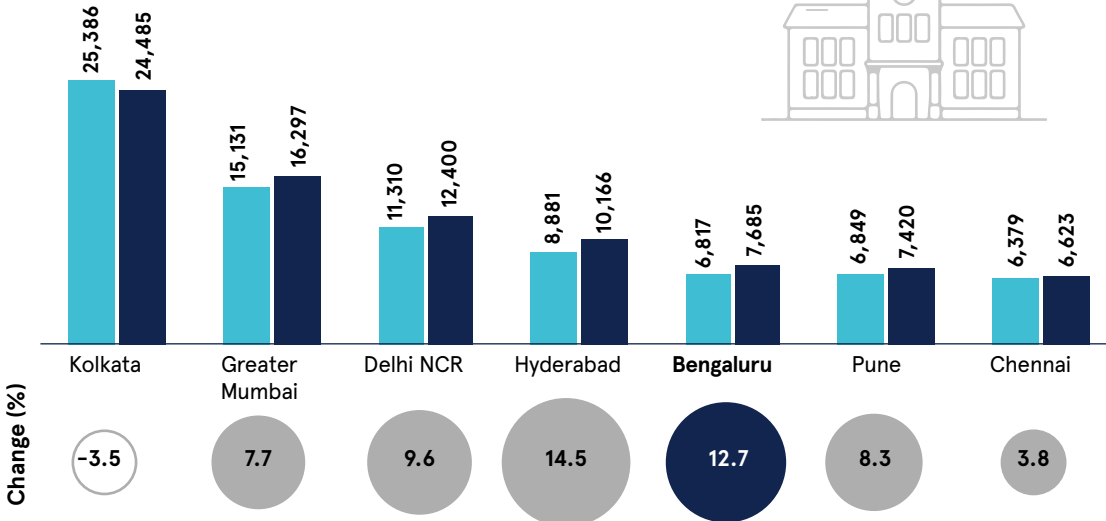


...ranked number 5 in terms of number of schools, but it is number 2 in terms of pace of adding schools in the past decade.

The number of schools in a city tends to mimic population. Hence, Bengaluru is bound to have fewer schools. But in the past decade, it's next only to Hyderabad in adding new schools.

Number of total schools

■ 2012-13 ■ 2021-22



Note: 1. Cities arranged in descending order of 2021-22 values. 2. Data is at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Greater Mumbai: Mumbai, Mumbai Suburban, Thane, Palaghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy.

Source: District Information System for Education (DISE)

Bengaluru is...



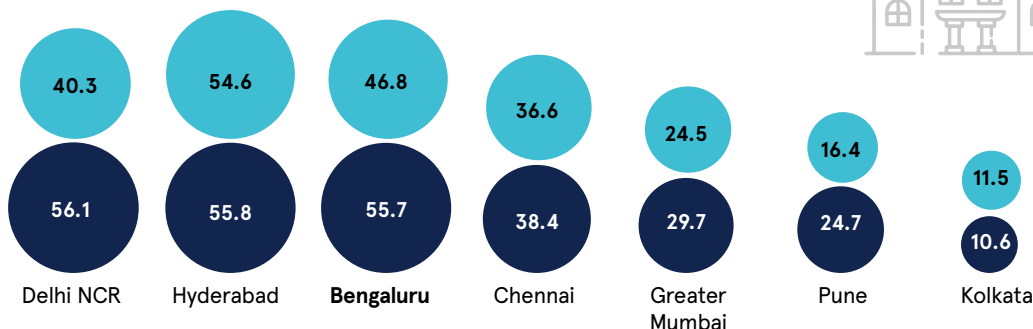
...one of the two cities seeing the private sector increase its share in the schools space in a big way, with the other being Delhi NCR.

The share of Bengaluru schools that are private and don't receive government aid has increased from about 47% in 2012-13 to about 56% in 2021-22. Only Delhi NCR showed a greater increase.

Share of private unaided (recognized) schools (%)

■ 2012-13

■ 2021-22



Note: 1. Cities arranged in descending order of 2021-22 values. 2. Data is at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Greater Mumbai: Mumbai, Mumbai Suburban, Thane, Palghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy.

Source: District Information System for Education (DISE)

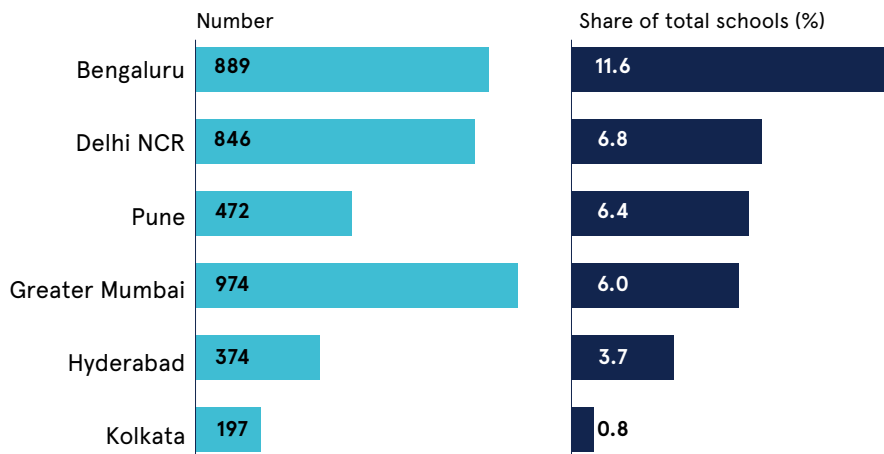
Bengaluru is...



...the leader in terms of share of residential schools in total schools. On average, about 1 in 9 schools in the city is a residential school.

In 2021-22, Bengaluru had 889 residential schools, next only to Greater Mumbai (974). But while they accounted for about 6% of Mumbai's schools, they accounted for 11.6% of Bengaluru's.

Number of residential schools, 2021-22



Note: 1. Cities arranged in descending order of share of total schools. 2. Data is at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Greater Mumbai: Mumbai, Mumbai Suburban, Thane, Palaghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy. 3. DISE data shows no residential schools in Chennai.

Source: District Information System for Education (DISE)

Bengaluru is...

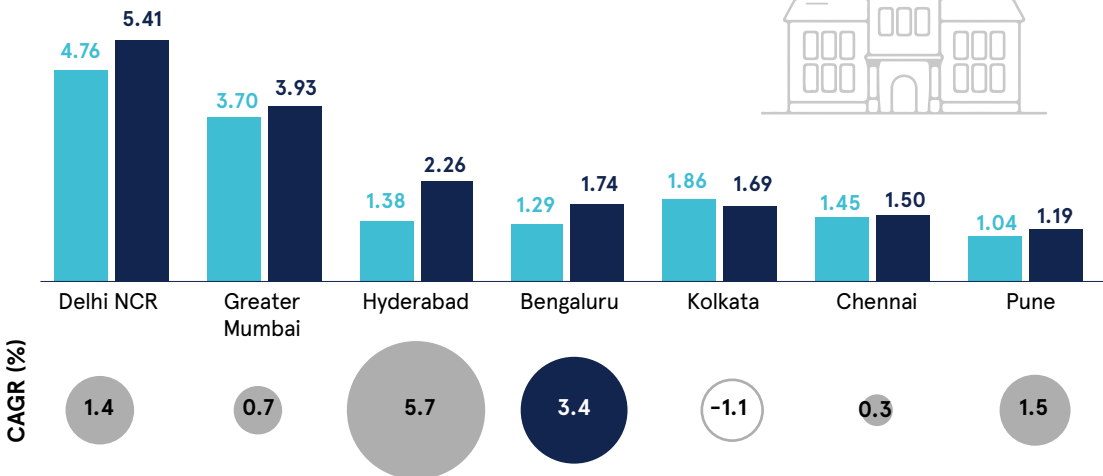


...dwarfed by Delhi and Mumbai on children in schools. However, in the past decade, its enrolment has grown the second-fastest, after Hyderabad.

The number of children in Bengaluru's schools are less than half of Mumbai and less than one-third of Delhi NCR. But it's among the faster growing on enrolment, along with Hyderabad.

Total enrolment (million)

■ 2012-13 ■ 2021-22



Note: 1. Cities arranged in descending order of 2021-22 values. 2. Data is at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Greater Mumbai: Mumbai, Mumbai Suburban, Thane, Palaghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy.

Source: District Information System for Education (DISE)

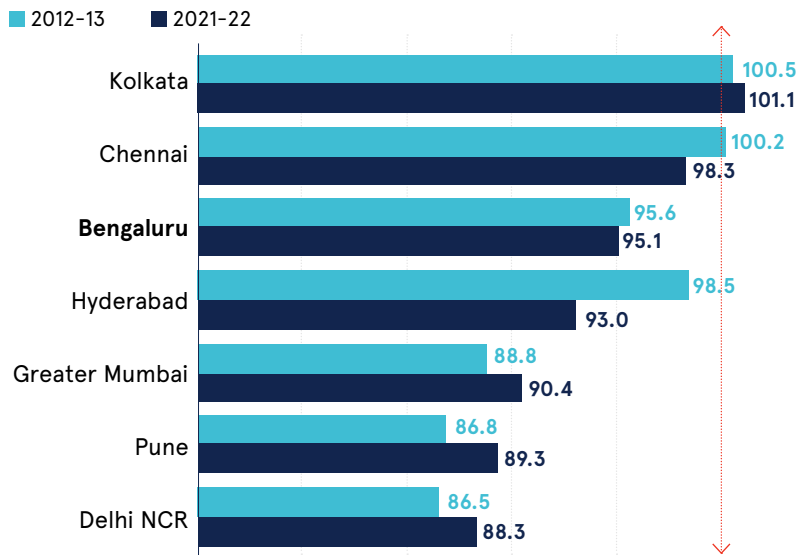
Bengaluru is...



...among the 6 cities where gender parity in enrolment has not been achieved. And it's one of the 3 where this has worsened in the past decade.

In 2012-13, for every 100 boys in schools in Bengaluru, there were about 95.6 girls. This fell to 95.1 in 2021-22.

Gender ratio in school enrolment (girls per 100 boys)



Note: 1. Cities arranged in descending order of 2021-22 values. 2. Data is at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Greater Mumbai: Mumbai, Mumbai Suburban, Thane, Palaghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy.

Source: District Information System for Education (DISE)

Bengaluru is...



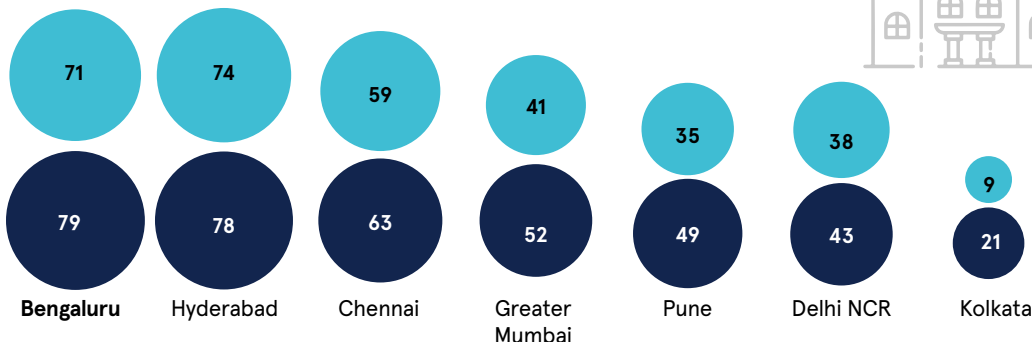
...ranked number 1 in terms of private share of school enrolment. Nearly 4 in 5 children in school are in private schools.

In every city, the private sector is playing an expanding role in the schools space. None more so than Bengaluru, where private schools account for about 79% of enrolment.

Share of private schools in total enrolment (%)

● 2012-13

● 2021-22



Note: 1. Cities arranged in descending order of 2021-22 values. 2. Data is at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Greater Mumbai: Mumbai, Mumbai Suburban, Thane, Palghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy.

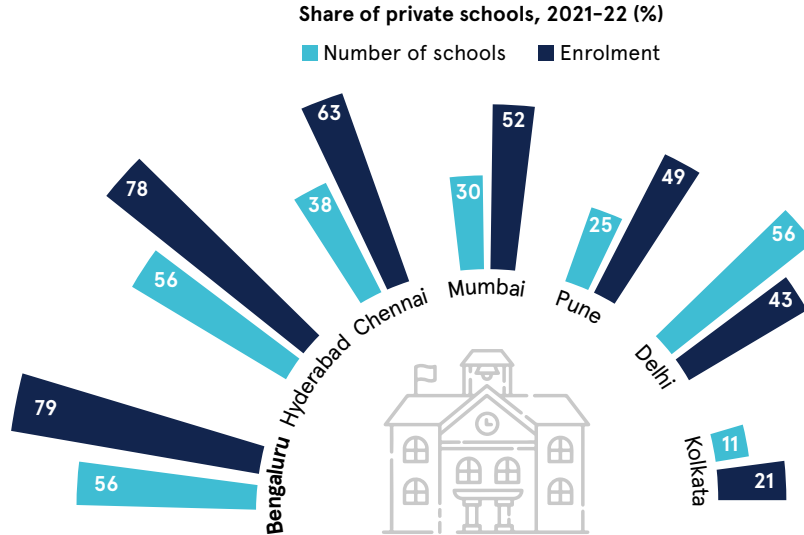
Source: District Information System for Education (DISE)

Bengaluru is...



...a city where the private sector has an outsized role in schools. While it makes up 56% of schools, it accounts for 79% of enrolment.

Bengaluru leads all cities in the share of private sector in both total schools and total enrolment.



Note: 1. Cities arranged in descending order of enrolment values. 2. Data is at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Greater Mumbai: Mumbai, Mumbai Suburban, Thane, Palghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy.

Source: District Information System for Education (DISE)

Bengaluru has...

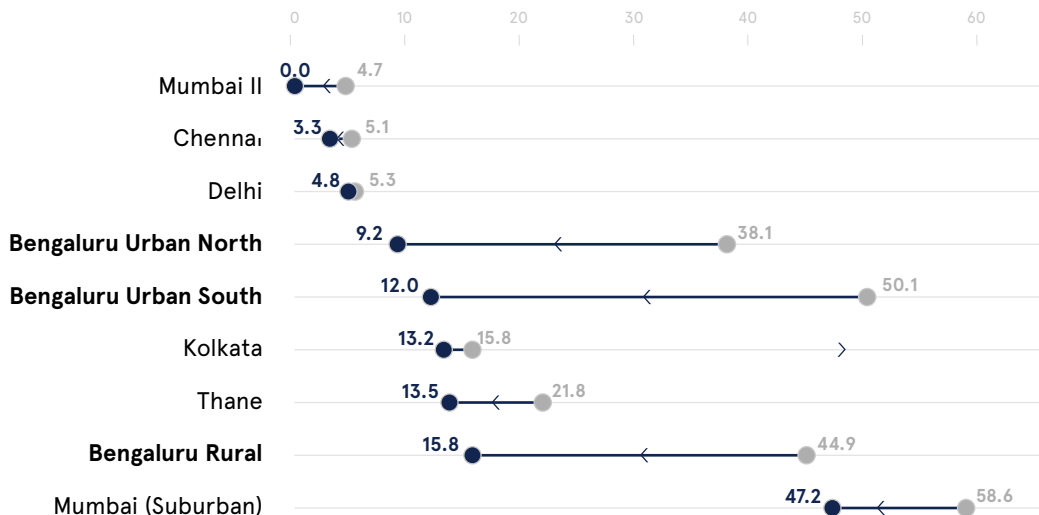


...made significant gains in reducing its dropout rate in schools at Class X. But it still has some way to go to match Mumbai, Chennai and Delhi.

In 2012, nearly one in two school-going children in the three Bengaluru school districts would drop out after Class X. This is now down to 9-16%. But Delhi, Chennai and Mumbai are below 5%.

Dropout rate at secondary level (class X) (%)

● 2012 ● 2022



Data at district level.

Source: District Information System for Education (DISE)

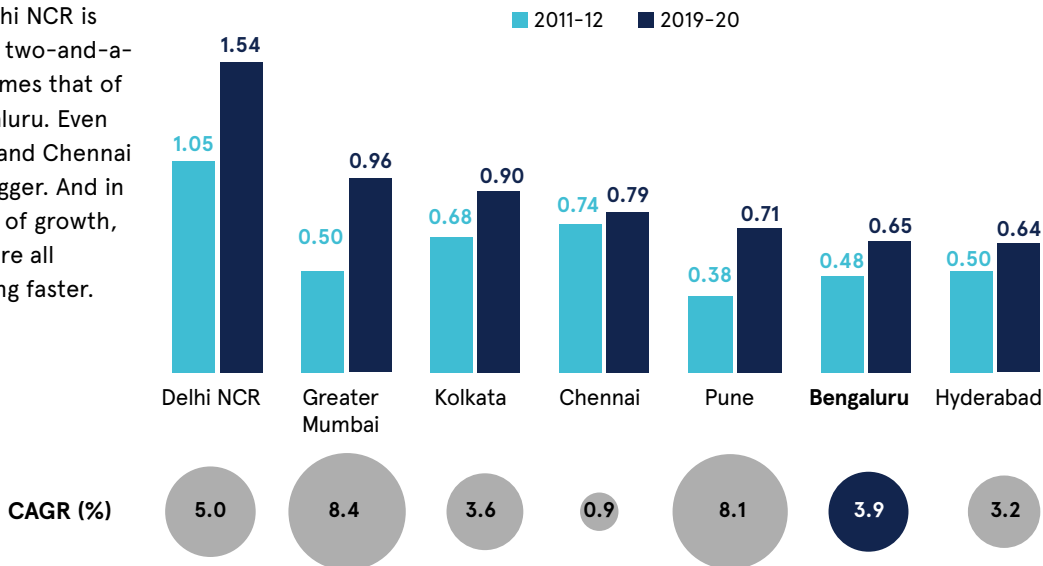
Bengaluru is...



...ranked number 6 in terms of students enrolled in colleges. In terms of expansion, the traditional higher-education hubs are still growing faster.

The college intake of Delhi NCR is about two-and-a-half times that of Bengaluru. Even Pune and Chennai are bigger. And in terms of growth, they are all growing faster.

Number of students enrolled in colleges (million)



Note: 1. Cities arranged in descending order of 2019-20 values. 2. Data is at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Greater Mumbai: Mumbai, Mumbai Suburban, Thane, Palaghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram and Tiruvallur. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy.

Source: All India Survey on Higher Education (AISHE), Ministry of Education

Bengaluru was...

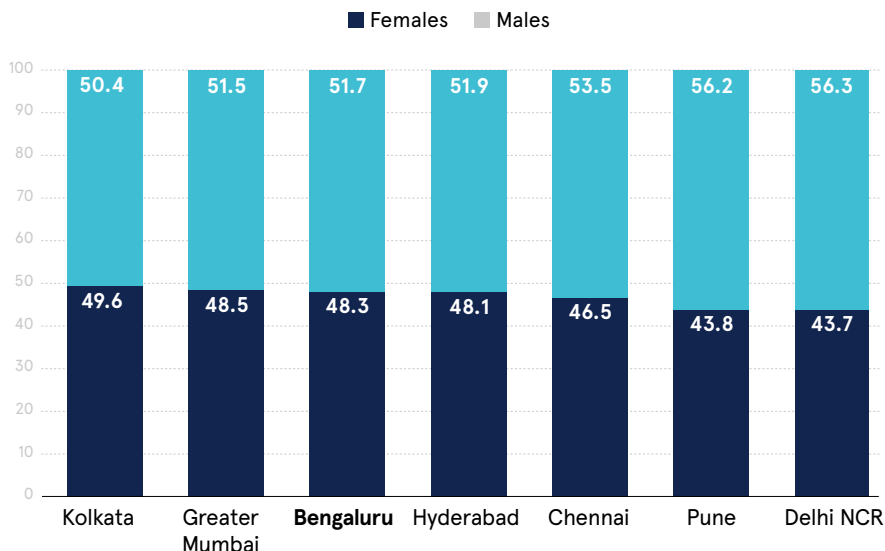


...ranked number 3 on parity in gender mix in college students in 2019, after Kolkata and Greater Mumbai.

In Bengaluru, females accounted about 48.3% of college enrolment in 2019, the latest data available. While Greater Mumbai was at 48.5%, Delhi NCR was a poor 43.7%.



Gender-wise share of college students, 2019 (%)



Note: 1. Cities arranged in descending order of female share. 2. Data is at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Greater Mumbai: Mumbai, Mumbai Suburban, Thane, Palaghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram and Tiruvallur. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy.

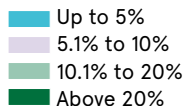
Source: All India Survey on Higher Education (AISHE), Ministry of Education

Bengaluru is...



...a lot about engineering. About 1 in 4 students enrolled in the city for higher-education is studying engineering.

Each city has its niche stream. It's engineering in the southern cities, arts in Delhi, and commerce in Mumbai. In Bengaluru, engineering is followed by commerce, medical science and management.



Break-up of college students by streams, 2019 (%)

	Bengaluru	Chennai	Delhi NCR	Greater Mumbai	Hyderabad	Kolkata	Pune
Engineering & technology	27.5	33.2	5.5	14.7	35.1	12.4	26.7
Commerce	19.2	15.7	12.3	39.4	16.5	10.6	17.0
Medical science	17.2	7.8	2.8	4.5	7.9	4.4	7.3
Management	10.6	7.7	5.1	8.4	9.1	3.2	10.9
Science	6.4	10.4	5.8	7.7	12.5	8.2	8.2
IT & computer	6.1	7.3	4.1	6.1	3.3	2.2	8.4
Arts	4.3	8.0	37.5	9.0	4.5	31.9	12.2
Law	3.2	1.3	2.0	2.8	2.1	1.5	3.2
Education	1.6	4.1	3.5	1.8	2.3	5.6	2.1
Social science	1.1	1.9	12.5	1.0	1.8	8.5	1.0
Others	2.7	2.7	8.8	4.4	4.8	11.6	3.1

Note: 1. Disciplines arranged in descending order of share for Bengaluru. 2. Data is at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Greater Mumbai: Mumbai, Mumbai Suburban, Thane, Palaghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram and Tiruvallur. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy. Source: All India Survey on Higher Education (AISHE), Ministry of Education

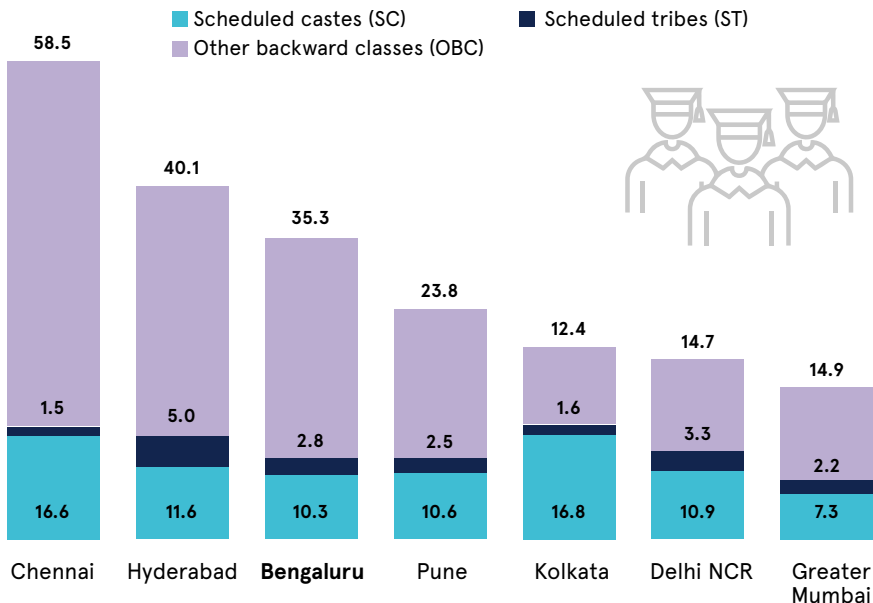
Bengaluru is...



...ranked number 3 in terms of share of students from backward social classes.

The presence of backward castes is both about enforcement of affirmative action and natural diversity. About 1 in 2 students in Bengaluru colleges is from SC/ST/OBC. It trails its southern neighbors on this count.

Share of college students from backward classes, 2019 (%)



Note: 1. Cities arranged in descending order of total SC/ST/OBC share. 2. Data is at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Greater Mumbai: Mumbai, Mumbai Suburban, Thane, Palghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram and Tiruvallur. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy. Source: All India Survey on Higher Education (AISHE), Ministry of Education

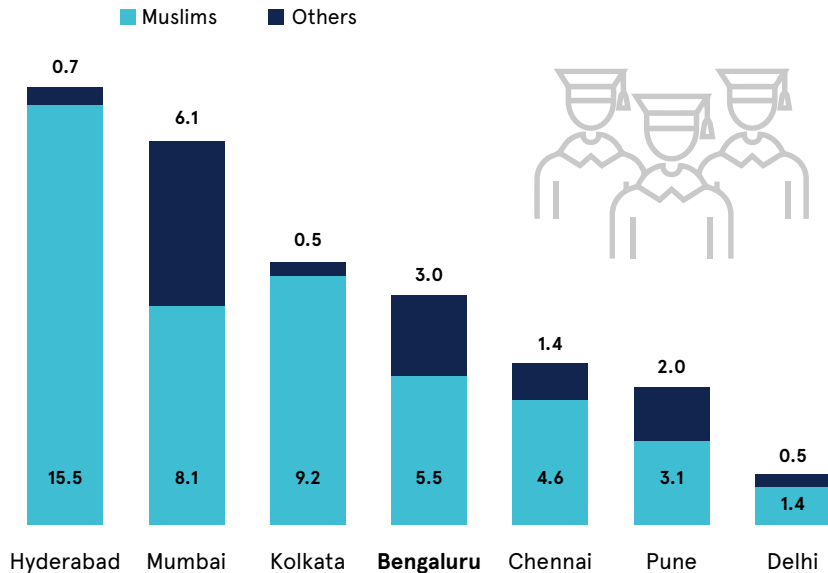
Bengaluru is...



...ranked number 4 in terms of presence of students from religious minorities in its colleges.

Religious minorities make up about 22% of India's population. None of the cities have a higher-education mix that sees them represented in a similar proportion. In Bengaluru, only about 8.5% of college students were from religious minorities.

Share of college students from minority religions, 2019 (%)



Note: 1. Cities arranged in descending order of values. 2. Data is at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Greater Mumbai: Mumbai, Mumbai Suburban, Thane, Palaghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram and Tiruvallur. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy.

Source: All India Survey on Higher Education (AISHE), Ministry of Education

Bengaluru is...

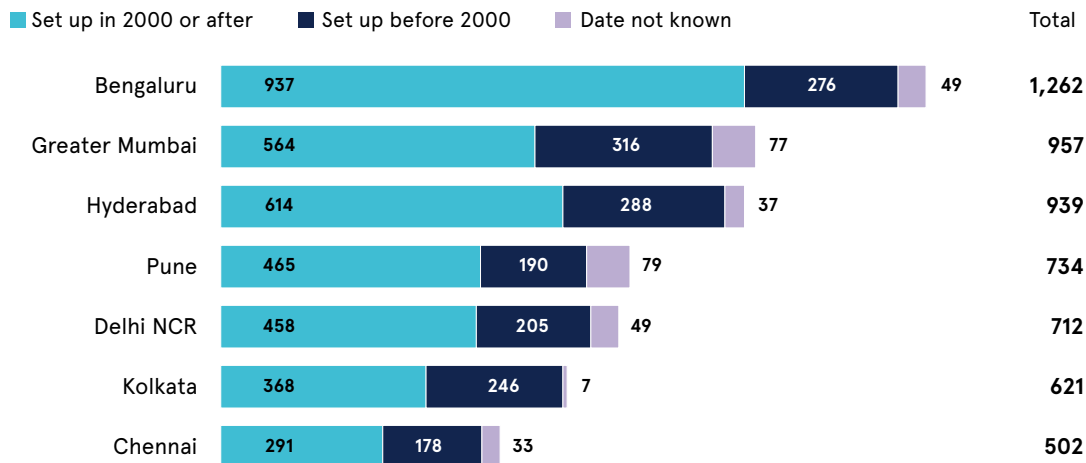


...ranked number 1 in terms of number of colleges. And nearly 3 in 4 of its colleges were set up this century.

Although Bengaluru has fewer students than Delhi and Mumbai, it has more colleges, with a majority being set up on or after 2000. In other words, Bengaluru is seeing college infrastructure precede enrolment.



Number of colleges by date of formation



Note: 1. Data as of 3 July, 2024. 2. Cities arranged in descending order of total colleges. 3. Data is at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Greater Mumbai: Mumbai, Mumbai Suburban, Thane, Palghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy.

Source: All India Survey on Higher Education (AISHE), Ministry of Education

Bengaluru is...

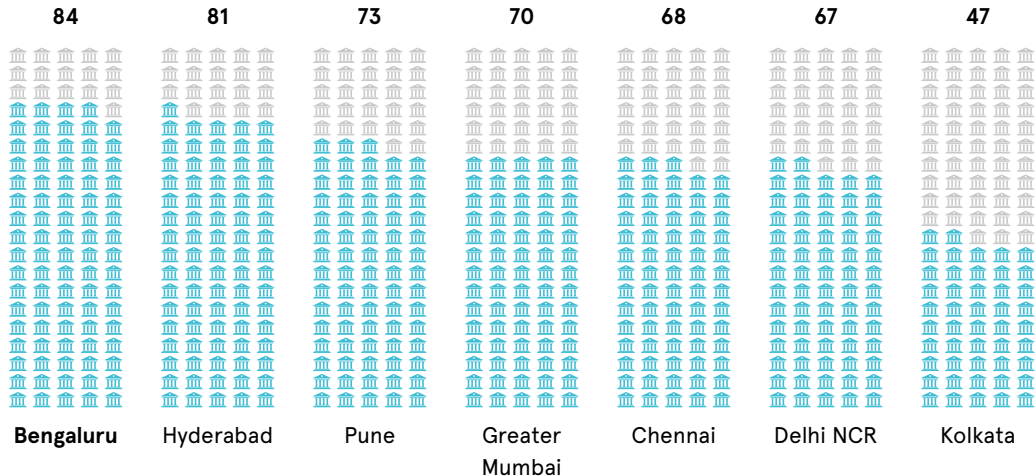


...ranked number 1 in terms of share of private colleges that don't receive aid from the government.

Of every 100 colleges in Bengaluru, as many as 84 are private entities. This is the most among all cities. By comparison, the share of the private sector in Delhi NCR is about 67%.



Private unaided colleges as share of total colleges (%)



Note: 1. Data as of 3 July, 2024. 2. Cities arranged in descending order of total colleges. 3. Data is at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Greater Mumbai: Mumbai, Mumbai Suburban, Thane, Palaghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy.

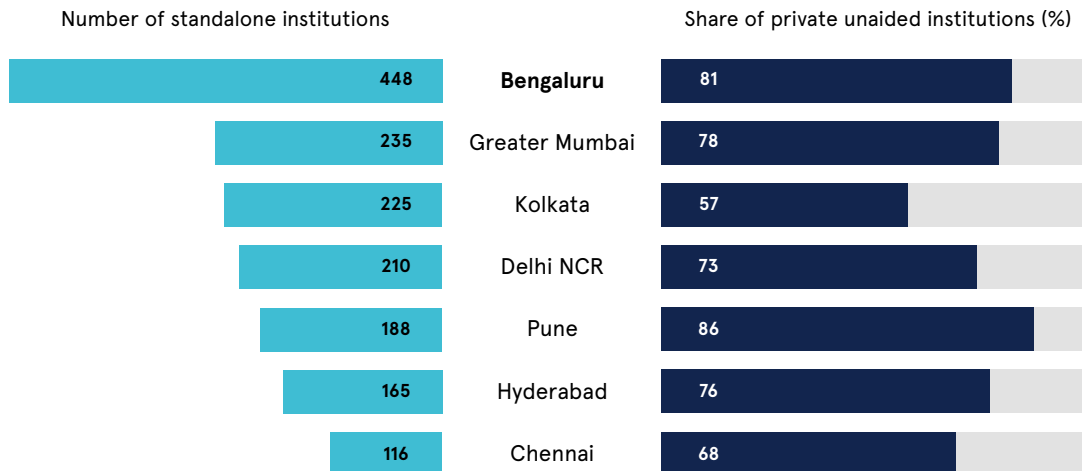
Source: All India Survey on Higher Education (AISHE), Ministry of Education

Bengaluru is...



...ranked number 1 on number of 'standalone institutes', which are principally about vocational training.

Bengaluru has 448 'standalone institutions', almost twice as many as the next city. A majority of those in Bengaluru are involved in training medical staff.



Note: 1. Data as of 3 July, 2024. 2. Cities arranged in descending order of total institutions. 3. Data is at an urban agglomeration by sum of relevant districts. Delhi: All Delhi districts plus Gurugram, Faridabad, Gautam Buddha Nagar and Ghaziabad. Greater Mumbai: Mumbai, Mumbai Suburban, Thane, Palghar and Raigad. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, Hugli, Haora, North 24 Parganas and South 24 Parganas. Hyderabad: Hyderabad, Medchal, Rangareddy and Sangareddy.

Source: All India Survey on Higher Education (AISHE), Ministry of Education



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Chapter 4

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The Liveable View



Photo: Joydeep Sensarma, Unsplash

Pleasant, with Room for Improvement

Bengaluru has much to offer from a liveability perspective—great weather, numerous and growing going out options, initiatives to build communities, affordability. But it also needs to address several bugbears to become more attractive—traffic and movement, water and crime.

Where Bengaluru Does Well

Weather

- # Temperatures at pleasing levels
- # Rains mostly a source of relief
- # Lowest air pollution

Health

- #2 in an index that measures 7 dimensions of health
- # Does well on women and family planning

Recreation

- #3 in film shows
- #1 in languages
- #2 in night shows

Community

- #1 in workshops
- #1 in meetups

Amenities

More than 9 of 10 households have modern sanitation, electricity and clean cooking fuel

Where Bengaluru Can Do Better

Traffic

- # One of the worst in the world
- # Over 1 million registered vehicles, and leader in adding vehicles per capita in the last 3 years
- # Only city to not reduce road accident deaths in the last 10 years
- # Metro is expanding and has ambitious network plans

Water

Has to fend for itself for half its water. But it's overusing its ground water and not re-using treated wastewater enough

Crime

- #4 on an index that assesses 8 domains of crime
- #2 on reported incidence of crime
- # Fares poorly on heinous crimes, theft and road accidents

Municipal budgets

- # Has the third-largest budget among Indian cities. But on a per capita basis, it's the lowest.
- # Reliant on external grants, than own funds, to take up public works

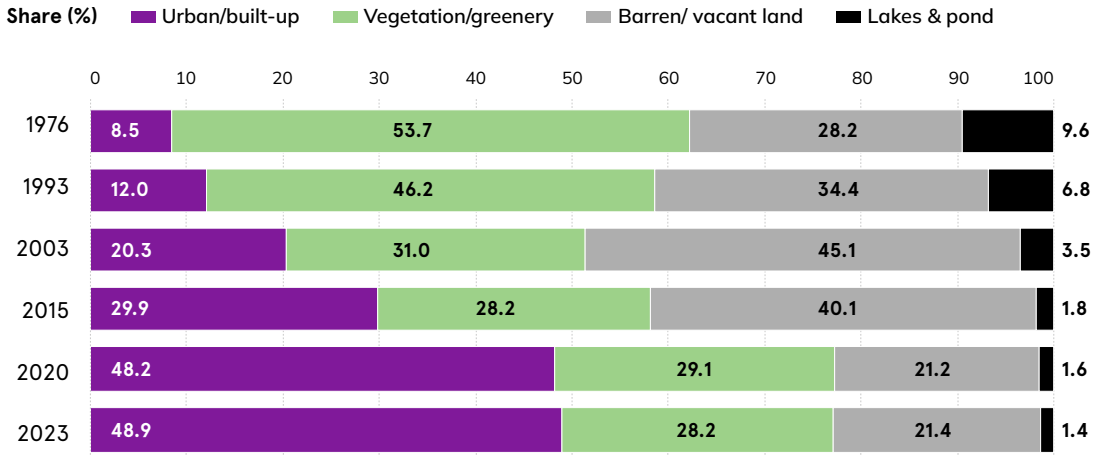
Bengaluru has...



...been growing rapidly and haphazardly over the last 5 decades, disturbing its ecological balance.

Bengaluru was projected to be the fastest-growing Asia-Pacific city by Oxford Economics, in its 2023 report. Over almost five decades, the urban sprawl has been phenomenal. The satellite images on the following page show that the urban sprawl has increased rapidly at the cost of vegetation/greenery and lakes/ponds area. Except for a few pockets, ecological balance of the city is lost, and most of the lakes and water ponds are polluted.

Total geographical area of BBMP = 709.53 sq km



Data source: LANDSAT series of satellite data
Processing: Professor P G Diwakar, ISRO Chair Professor, NIAS, Bengaluru

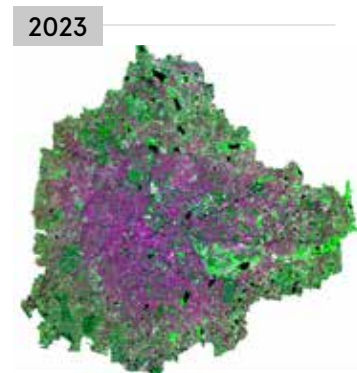
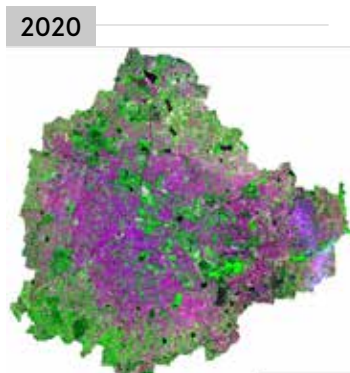
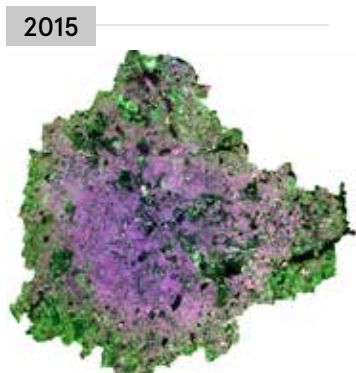
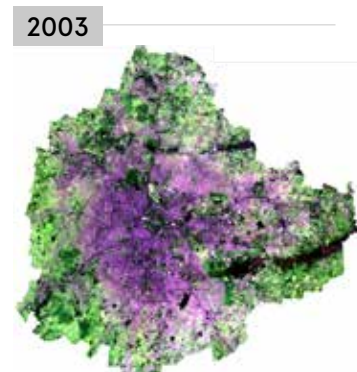
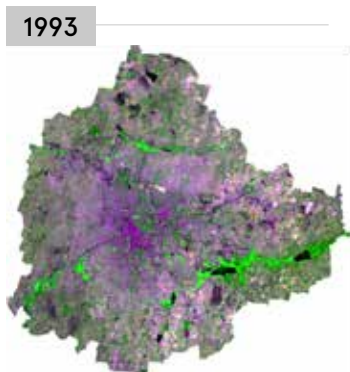
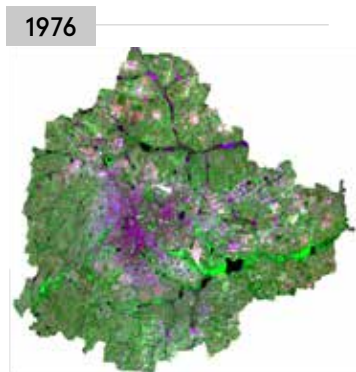
Bengaluru through the years

Urban/built-up areas: Dark and light magenta/pink

Vegetation areas: Different tones of green

Barren/vacant land: Bright white & greyish tones

Lakes and ponds: Dark patches and dark brown (excludes water hyacinth)



Data source: LANDSAT series of satellite data
Processing: Professor P G Diwakar, ISRO Chair Professor, NIAS, Bengaluru

Bengaluru has...

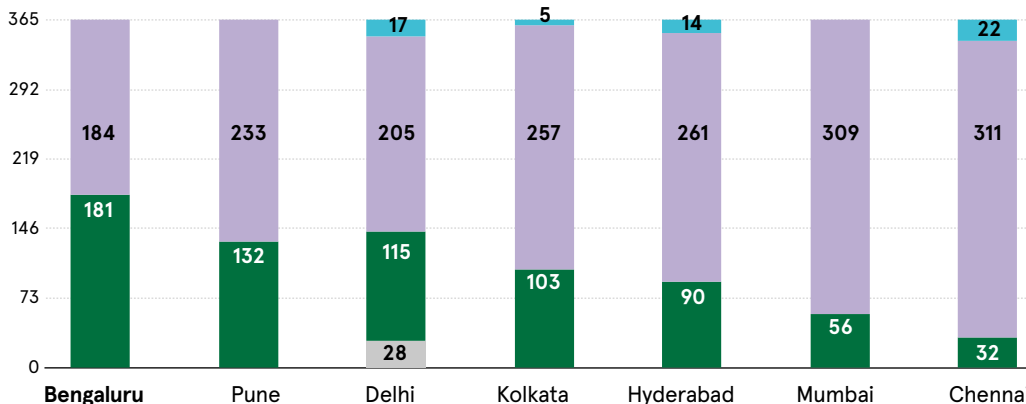


...the most days in a year where its maximum temperature is at comfortable and pleasing levels.

Bengaluru avoids extreme temperatures on both sides. For half the year, its maximum temperature is below 30 degrees. And, unlike Delhi, it doesn't have a cold winter.

Maximum temperature (number of days in a year)

- Cold (Up to 20 degrees celsius)
- Normal (20-30 degrees celsius)
- Hot (30-40 degrees celsius)
- Very hot (Above 40 degree celsius)



Note: Data for 2023. Cities arranged in descending order of values for 'normal' temperature band.
Source: India Meteorological Department (IMD)

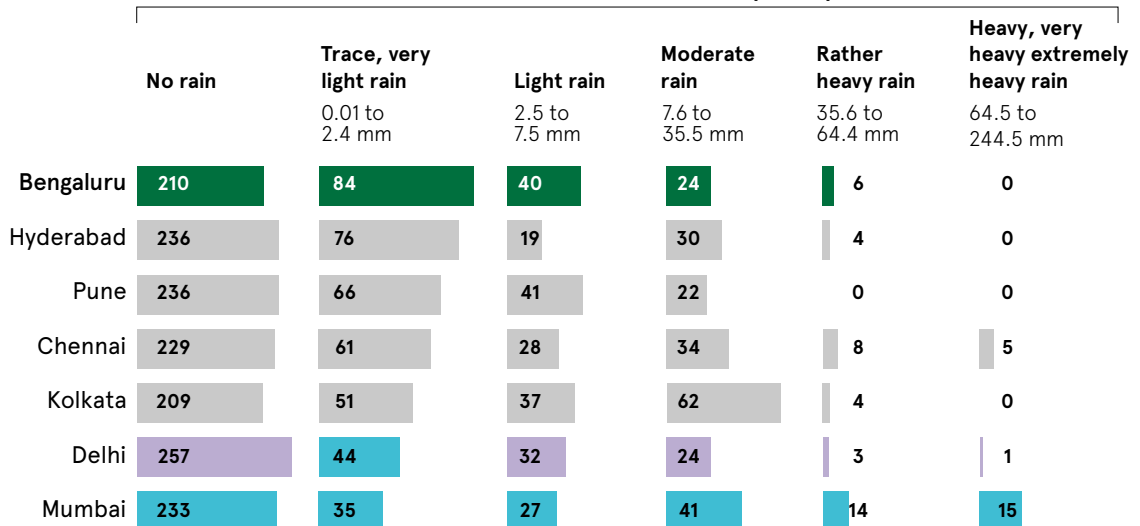
Bengaluru has...



...the maximum number of days in a year where rains are an interlude and a source of relief.

On the one hand, Bengaluru has the maximum number of 'very light rain' days. On the other, it sees fewer days of heavy rain than coastal cities like Mumbai and Chennai.

Rainfall distribution (number of days in a year)



Data for 2023.

Source: India Meteorological Department (IMD)

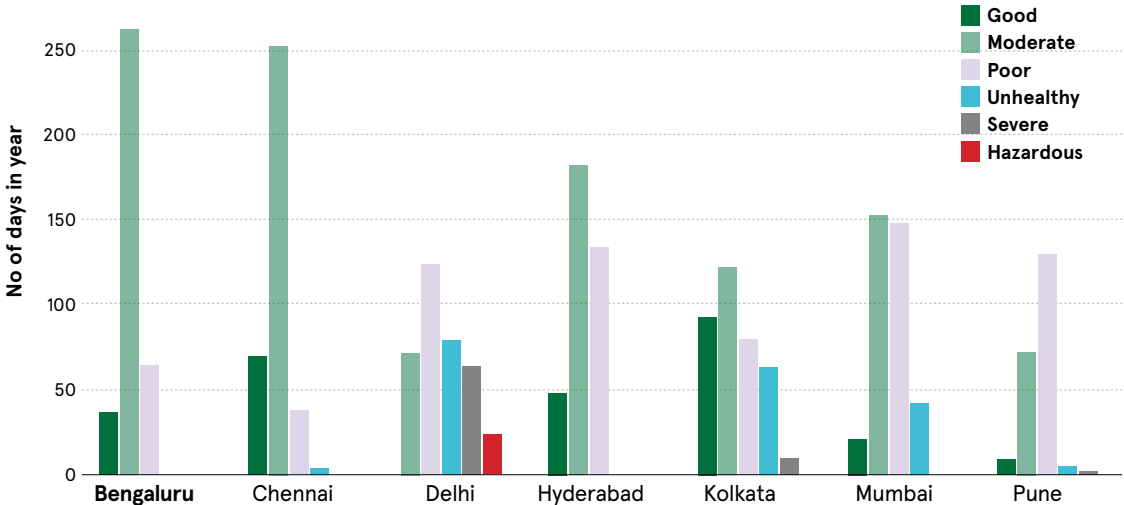
Bengaluru has...



...the maximum number of days in a year when the air is fine.

On average, in 5 out of 6 days in a year, Bengaluru had air quality that is categorised as 'good' or 'moderate'. Chennai is the only city in our set that matched it on this count.

AQI Category Counts for 2022



Note: Data for 2022 for all cities, barring Delhi, which is for 2021.

Source: India Meteorological Department (IMD)

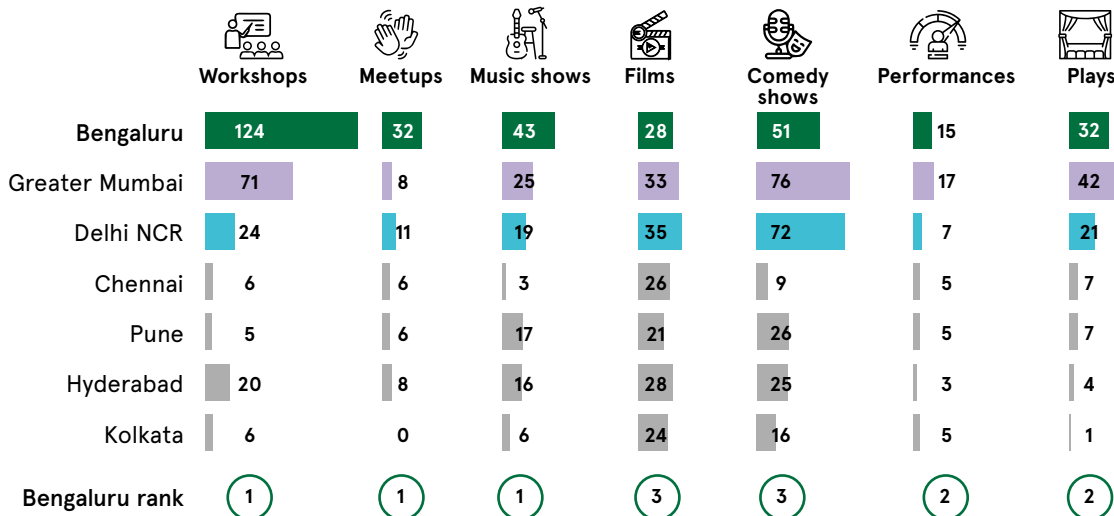
Bengaluru has...



...the maximum number of workshop and meetup listings on online platform BookMyShow.

On traditional going out options like films, comedy shows and plays, Bengaluru competes well against Delhi and Mumbai. On emerging options that entail a spirit of enterprise and networking, it is ahead.

Number of listings on BookMyShow



Note: 1. Date collated on January 26, 2024 (Friday), for the week of January 26 to February 1 (Friday to Thursday) for films, and for the weekend of January 27-28 (Saturday and Sunday) for all other events. 2. Delhi NCR comprises Delhi, Noida, Gurugram, Faridabad and Ghaziabad. Greater Mumbai comprises Mumbai, Thane and Navi Mumbai.

Source: BookMyShow

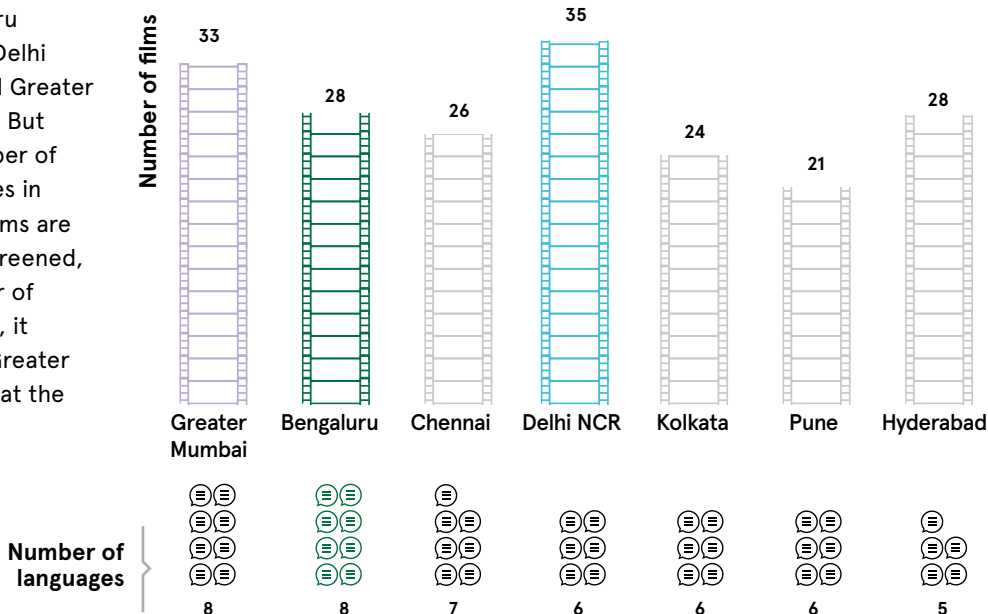
Bengaluru is...



...screening fewer films in cinemas than Delhi NCR and Greater Mumbai, but it matches the best on number of languages in which films are screened.

On number of films screened, Bengaluru follows Delhi NCR and Greater Mumbai. But on number of languages in which films are being screened, a marker of diversity, it equals Greater Mumbai at the top.

Film listings on BookMyShow



Note: 1. Date collated on January 26, 2024 (Friday), for films being screened in the week of January 26 to February 1 (Friday to Thursday). 2. Cities arranged in descending order of number of languages. 3. Delhi NCR comprises Delhi, Noida, Gurugram, Faridabad and Ghaziabad. Greater Mumbai comprises Mumbai, Thane and Navi Mumbai.

Source: BookMyShow

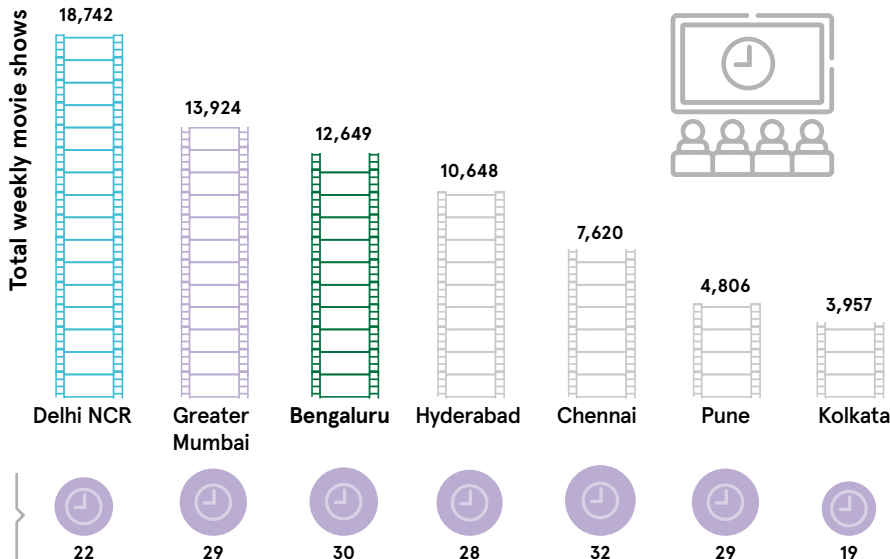
Bengaluru is...



...ranked third in number of weekly film shows, but slots in second on the share of night shows.

Bengaluru has about 32% fewer film shows in a week than Delhi NCR and about 9% less than Greater Mumbai. But it's next only to Chennai in share of night shows—a marker of night life and safety.

Film screenings on BookMyShow



Note: 1. Data for the week of January 15–21, 2024 (Saturday to Friday). 2. Night shows are shows starting from 9 pm to midnight. 3. Delhi NCR comprises Delhi, Noida, Gurugram, Faridabad and Ghaziabad. Greater Mumbai comprises Mumbai, Thane and Navi Mumbai. Source: BookMyShow

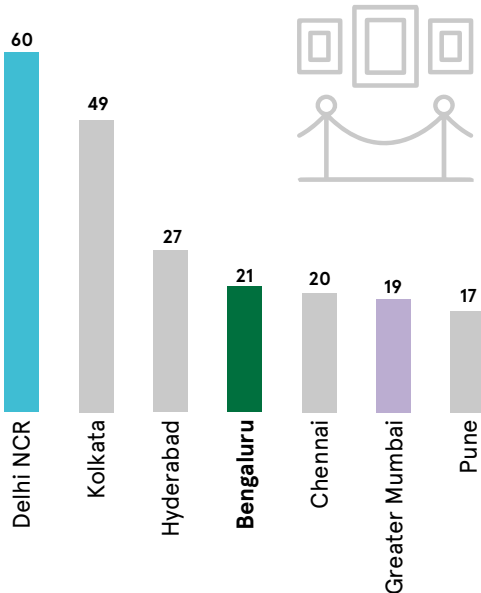
Bengaluru is...



...ranked number 4 in terms of number of museums, after Delhi NCR, Kolkata and Hyderabad.

Bengaluru has about one-third the number of museums that Delhi has and less than half of what Kolkata does. It also trails Hyderabad.

Number of museums, public and private



Bengaluru museums

- HAL Heritage Centre and Aerospace Museum
- Indian Cartoon Gallery
- Indian Music Experience Museum
- Jawaharlal Nehru Planetarium
- Karnataka Chitrakala Parishath Museum
- Karnataka Gandhi Smarak Nidhi
- Karnataka Government Museum
- Karnataka High Court Museum
- Kempegowda Museum
- KSSRDI Silk Museum
- Madras Sappers Museum and Archives
- Museum of Art and Photography (MAP)
- National Gallery of Modern Art (NGMA)
- Nimhans Brain Museum
- Philatelic Museum
- Rezwan Razack's Museum of Indian Paper Money
- Science Gallery Bengaluru
- SJBHS Museum
- Shortwave Radio Museum and Knowledge Centre
- Vimor Museum
- Visvesvaraya Industrial and Technological Museum

Source: Directory of Museums in India, 2023, Intach

Bengaluru has...



...crossed the 11 million mark in terms of number of vehicles registered. About 9 in 10 vehicles are private vehicles.

Between 2017 and 2024, the number of vehicles registered in the city have grown about 6% per year. Both 2- and 4-wheelers have kept pace. A big jump is seen in construction moving equipment.

Number of vehicles registered in Bengaluru

	2017	2024	CAGR (%)
Non-transport vehicles (private)			
Two wheelers	51,23,057	78,09,958	6.2
Cars	16,61,276	23,92,477	5.3
Construction moving equipment	550	4,474	34.9
Transport vehicles			
Trucks and lorries	1,65,140	2,68,020	7.2
Light good vehicles: 4 wheeler	1,35,436	2,03,189	6.0
Light good vehicles: 3 wheeler	50,707	73,241	5.4
Buses	1,01,992	1,24,807	2.9
Taxis	2,04,454	2,88,449	5.0
LMV passenger: 3 seater (autos)	2,40,069	3,26,603	4.5
LMV passenger: others	19,773	90,696	24.3
Total	77,75,104	1,16,27,545	5.9



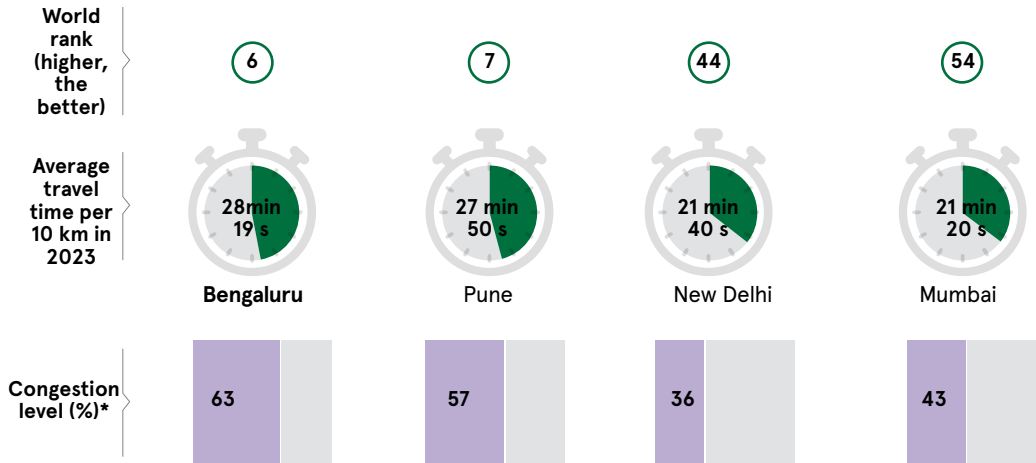
Source: OpenCity

Bengaluru has...



...the worst traffic among our set of 7 Indian cities. Its traffic is also among the most notorious in the world.

On average, it takes about one-third more time to travel a distance of 10 km in Bengaluru as compared to New Delhi and Mumbai.



Congestion level: Average additional time in % lost to traffic in 2023, compared to free-flow traffic conditions.

Source: TomTom

Bengaluru sees...

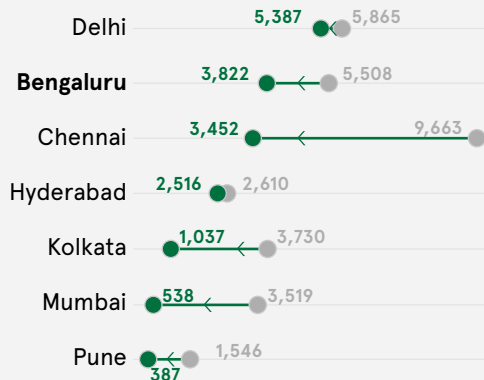


...the second-most number of road accidents, after Delhi. And it's the only city that hasn't reduced road accident deaths in the last 10 years.

Over the past decade, all leading Indian metros have seen road accidents decline. The pace of decline in Bengaluru is the third-lowest. Further, deaths in road accidents have increased in the city.

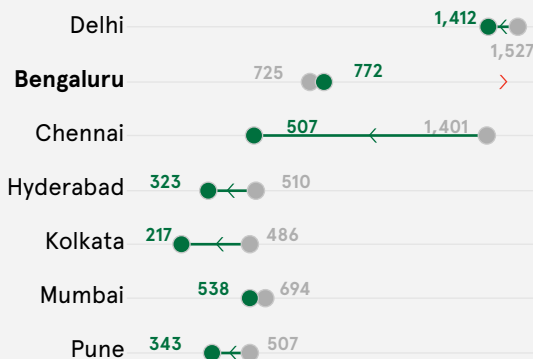
Number of road accident cases registered with NCRB

● 2012 ● 2022



Number of deaths in road accidents

● 2012 ● 2022



Note: Cities arranged in descending order of cases.

Source: Accidental Deaths & Suicides in India Report, National Crime Records Bureau (NCRB)

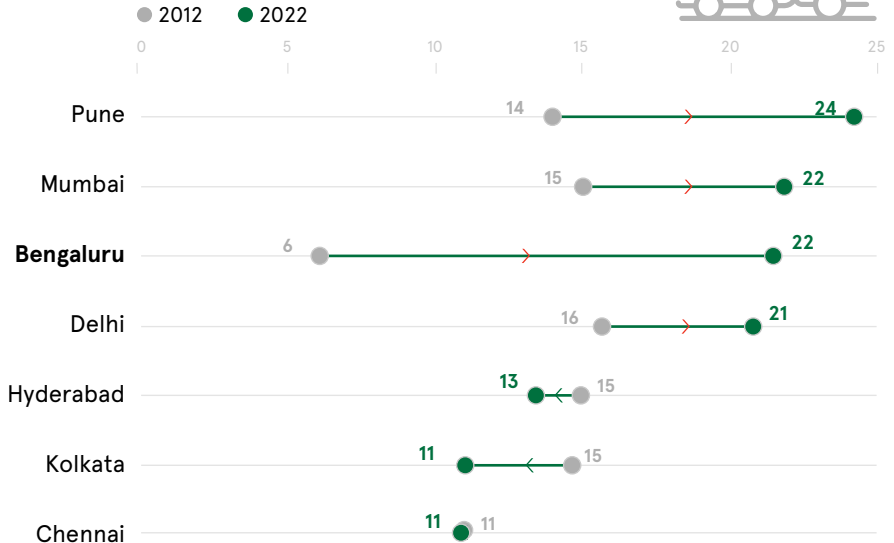
Bengaluru has...



...seen a big spike in the share of road accident cases reported between 12 am and 6 am.

In the past decade, the only 6-hour band where road accident cases have increased in Bengaluru is the 12-6 am band. Given that 80% deaths happen on city roads (as opposed to national and state highways), it shows a city that has movement late at night, and can be dangerous.

Share of road accident cases that happen between 12 am and 6 am (%)



Note: Cities arranged in descending order of 2022 values.

Source: Accidental Deaths & Suicides in India Report, National Crime Records Bureau (NCRB)

Bengaluru is...



...ranked #2 in operational metro length and stations, but is about one-fifth of Delhi in length and one-fourth in number of stations.

Bengaluru is looking at metro in a big way to solve its traffic woes. Completion of the ongoing construction will make it about half of Delhi in length. But its average ridership per km is half of Kolkata and Delhi, a possible factor being not enough lines that lend it spread and connections.

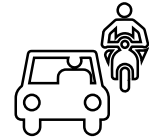
	Starting year	Stations	Length (km)			Annual ridership (million)	Annual ridership per km of length (million)
			Operational	Under construction	Planned		
Delhi	2002	256	351	65	65	1790	5.1
Bengaluru	2011	66	72	102	146	174	2.4
Hyderabad	2017	57	67		346	178	2.6
Chennai	2015	40	55	119	154	71	1.3
Kolkata	1984	40	47	48	144	256	5.5
Mumbai	2014	43	47	146	152	126	2.7
Noida	2019	21	30		85	5	0.2
Pune	2022	20	24	53	129	NA	NA
Gurgaon	2013	11	13		199	18	1.4
Navi Mumbai	2023	11	11		12	NA	NA

Note: Cities arranged in descending order of operational length.
Source: Wikipedia

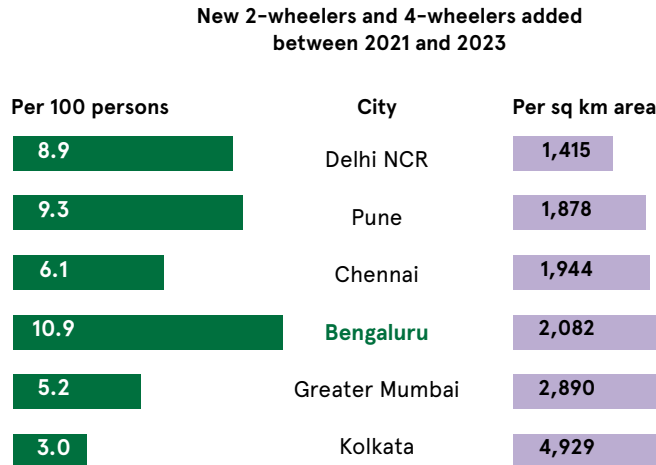
Bengaluru has...



...added more 2- and 4-wheelers on a per capita basis than other Indian cities between 2021 and 2023.



On the one hand, Bengaluru's growing prosperity is seeing more people acquire personal transport—the highest on a per capita basis. On the other hand, its vehicular population adjusted for area is already on the higher side.



Note: 1. Vehicle registration and population data at an urban agglomeration level by sum of relevant districts. Delhi NCR: Delhi, Gurugram, Faridabad, Ghaziabad. Mumbai: Mumbai City, Mumbai Suburban, Thane, Palghar, Raigad and Navi Mumbai. Bengaluru: Bengaluru Urban and Bengaluru Rural. Chennai: Chennai, Kanchipuram, Tiruvallur and Chengalpattu. Kolkata: Kolkata, North 24 Parganas, South 24 Parganas, Hugli and Howrah. 2. Vehicle registration data for Hyderabad not available. 3. Population and area data for 2020. 4. Area for municipal boundaries.

Source: Vahan, Ministry of Road Transport & Highways (vehicles); WorldPop (population and area)

Bengaluru is...



...ranked #2 on a combined health index that measures various dimensions of personal health and hygiene, and institutional capacity.

Among our set of Indian cities, from a health perspective, Bengaluru scores well on women and family planning. But it's a laggard in providing insurance and in children's health.

Ranks (out of 11) (Higher, the better)

Rank ■ 1 to 3 ■ 4 to 6 ■ 7 to 9 ■ 10 to 11

Health index ranking	District	Childbirth	Children	Family planning	Home	Men	Safety net	Women
1	Chennai	1	2	2	7	6	1	6
2	Bangalore	4	6	1	5	3	5	2
3	Mumbai	5	11	4	1	11	4	1
4	Delhi	2	5	6	4	4	6	3
5	Gurgaon	10	3	3	9	9	3	4
6	Hyderabad	7	4	7	2	1	2	11
7	Gautam Buddha Nagar	11	1	5	10	10	7	9
8	Kolkata	3	10	8	8	2	9	5
9	Mumbai Suburban	8	9	10	3	5	10	8
10	Thane	6	8	9	11	7	8	10
11	Pune	9	7	11	6	8	11	7

Note: 1. Indices based on NFHS data, and covered 27 metrics across 7 themes. To see metrics and index methodology, turn to Page 182. 2. Data at a district level.

Source: National Family Health Survey 2019-20

Bengaluru is...



...#4 on a crime index that looks at eight different domains of crimes, and different dimensions therein.

In incidence and solving cyber and economic crimes, Bengaluru is among the better Indian cities. But it's a laggard in road accidents, theft and heinous crimes.

Rank (out of 7) (Higher, the better)

Rank ■ 1 to 2 ■ 3 to 4 ■ 5 to 7

Crime index ranking	District	Overall crime	Women	Children	Heinous crimes	Theft	Road accidents	Cyber crimes	Economic crimes
1	Hyderabad	1	3	2	3	2	3	2	1
2	Kolkata	7	2	4	1	1	1	3	4
3	Chennai	2	1	7	4	3	4	4	5
4	Bengaluru	3	4	1	6	6	7	1	2
5	Mumbai	6	5	5	2	4	2	7	7
6	Pune	5	6	6	5	5	5	6	3
7	Delhi	4	7	3	7	7	6	5	6

Note: 1. Indices based on NCRB data for 2022, and covered 28 metrics across 8 themes. To see metrics and index methodology, turn to Page 182. 2. Data at a city level.

Source: National Crime Records Bureau





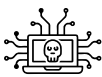

Bengaluru is...



...ranked #2 in terms of incidence of crime, next to Delhi NCR, though there is a wide gap between the two.

Bengaluru reports the highest rate of cyber crimes. It reports the second-highest rate of crimes against women and economic offences.

Crime rate per lakh population (2022)

	 All cognizable crimes (IPC + SLL)	 Crime against women	 Murder	 Theft	 Cyber crimes	 Economic offences
Delhi	1,953	187	3.1	1,260	4	31
Bengaluru	543	97	2.0	89	117	38
Mumbai	484	73	0.7	97	26	38
Chennai	450	17	1.2	37	3	12
Hyderabad	299	84	1.0	39	57	78
Pune	281	87	2.1	65	7	20
Kolkata	87	28	0.2	9	1	14
Bengaluru rank (out of 7)	6	6	5	5	7	6

Source: National Crime Records Bureau




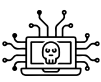


Bengaluru is...



...among the cities that report a high rate of crime. But it also fares better in its police resolving those cases.

It's important for the police to settle cases, as opposed to carrying them forward, as the latter adds to the case load in subsequent years. On all crimes, Bengaluru's police had a lower pendency.

Police disposal: pendency (%)

	 All cognizable crimes (IPC + SLL)	 All cognizable crimes (SLL)	 Crime against women	 Cyber crimes	 Economic offences	 Children
Delhi	26	43	60	86	78	57
Bengaluru	27	32	28	39	54	21
Hyderabad	28	20	30	58	40	26
Chennai	35	31	80	91	92	82
Pune	64	38	43	89	67	45
Mumbai	64	64	74	84	80	79
Kolkata	70	57	45	66	82	53
Bengaluru rank (out of 7)	2	3	1	1	2	1

Note: Cities arranged in ascending order of values for IPC crimes. Data for 2022.

Source: National Crime Records Bureau







Bengaluru is...



...not doing too well in seeing its courts clear cases. Neither are other Indian cities.

It's important for the courts to settle cases, as opposed to carrying them forward, as the latter adds to the case load in subsequent years. All cities fare poorly on this count, including Bengaluru.

Courts disposal: pendency (%)

	 All cognizable crimes (IPC)	 All cognizable crimes (SLL)	 Crime against women	 Cyber crimes	 Economic offences	 Children
Hyderabad	81	74	87	43	80	84
Bengaluru	85	78	89	21	95	85
Delhi	86	94	97	99	98	97
Chennai	87	48	89	88	97	92
Mumbai	89	90	95	98	97	95
Kolkata	96	92	96	98	97	93
Pune	97	99	98	100	100	99
Bengaluru rank (out of 7)	2	3	2	1	2	2

Note: Cities arranged in ascending order of values for IPC crimes. Data for 2022.

Source: National Crime Records Bureau

Bengaluru is...



..ranked #3 in increase in housing prices in the last 10 years. Yet, it remains more affordable than Delhi NCR and Greater Mumbai.

In the last 10 years, Bengaluru has seen an average price rise of about 6% per year in average carpet area price of under-construction houses.

Average carpet area price of under-construction properties (Rs per sq ft)

Average price rise per year in 10 years (%)

29,540	Mumbai	2.6
20,604	Navi Mumbai	5.1
15,280	Thane	2.7
12,601	Gurugram	2.8
12,299	Noida	4.7
12,254	Kolkata	3.1
12,056	Bengaluru	6.2
12,035	Delhi	1.9
11,684	Chennai	2.4
11,101	Hyderabad	8.6
10,524	Pune	3.2
9,598	New Town Kolkata	4.9
8,949	Ghaziabad	6.8
8,369	Greater Noida	6.2

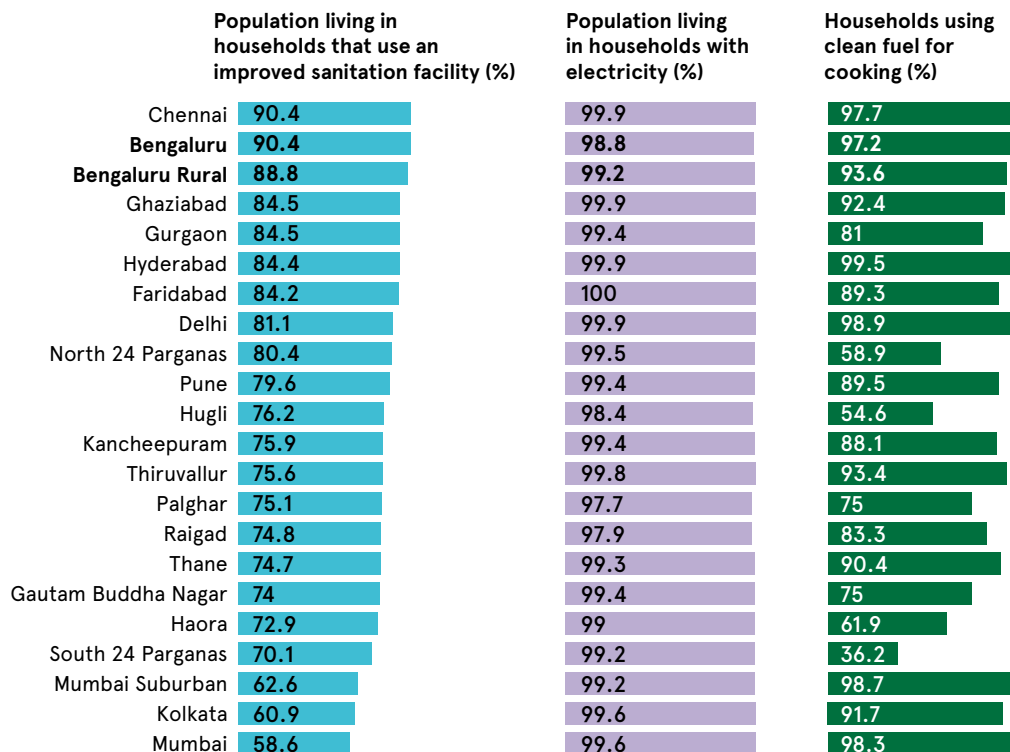


Note: 1. Data for period ended September 2023. Cities arranged in descending order of average carpet area price.
Source: National Housing Bank Residex

Bengaluru is...



..faring reasonably well in ensuring access to improved sanitation, electricity and clean fuel for cooking.



Note: 1. Districts arranged in descending order of values for sanitation.

Source: National Family Health Survey, 2019-20

Bengaluru is...

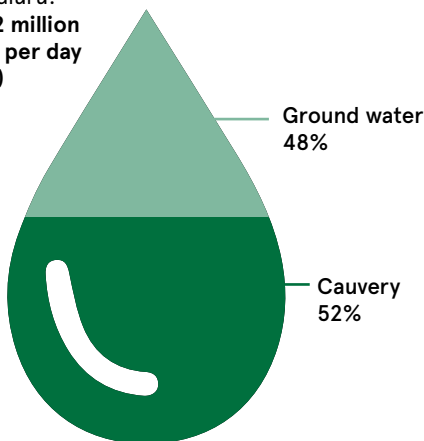


..required to meet about half its water needs itself. And, at the moment, it is extracting more water from the ground than it is putting back.

The Cauvery river meets only about 52% of the city's water needs. Thus, Bengaluru needs to draw on ground water. But it is extracting more than it is replenishing, like several Indian cities.

Bengaluru's water demand and supply

Total requirement of Bengaluru:
2,832 million litres per day (MLD)



Ground water usage

Extent of ground water extraction (%)

Above 100%
 75% to 100%
 Below 75%

	2013	2023
Gurugram	133	133
Faridabad	99	99
Bengaluru Rural	132	132
Bengaluru Urban	150	150
Chennai	185	185
Ghaziabad	107	107
Gautam Buddha Nagar	103	103
Delhi	127	127
Hyderabad	66	66
Pune	74	74
North 24 Parganas	66	66
Tiruvallur	68	68
Hugli	49	49
Kanchipuram	65	65
Haora	25	25
Thane	22	22
Raigad	16	16

Source: Kulranjan, R., Palur, S. and Nesi, M. (2023). How Water Flows Through Bengaluru: Urban Water Balance Report. Water, Environment, Land and Livelihoods (WELL) Labs at Institute for Financial Management and Research

Note: Districts arranged in descending order of 2023 values. Source: Dynamic Ground Water Resources of India, Central Ground Water Board

Bengaluru is...



..doing a better job in treating wastewater and reusing it than most other cities, but its impact is low.

Only about 60% of Bengaluru's wastewater is being treated and reused. Further, 95% of it is being sent out of the city, according to a 2023 WELLS Labs study.

	Wastewater usage				
	Current wastewater generation (MLD)	Capacity of treatment plants (MLD)	Wastewater treated (MLD)	Treated wastewater reused (MLD)	% of treated wastewater reused
Bengaluru	1,440	1,183	920	460	31.9
Pune	750	567	535	400	53.3
Delhi	3,268	3,058	2,383	340	10.4
Hyderabad	1,975	772	772	70	3.5
Chennai	1,199	745	530	52	4.3
Greater Mumbai	2,190	2,721	349	49	2.2
Kolkata	1,400	179	179	0	0.0



Note: Cities arranged in descending order of treated wastewater reused.

Source: Compendium of Recycle and Reuse of Wastewater, Ministry of Housing and Urban Affairs, September 2021

Bengaluru has...



...the third-largest municipal budget, after Mumbai and Delhi. On a per capita basis, however, its budget is the smallest.

For 2024-25, the municipal corporation of Bengaluru has projected expenditure of Rs 12,369 crore. That's roughly half of Delhi and one-fifth of Mumbai. On a per capita basis, all cities are providing for more, though some not significantly more.



City	Expenditure, 2024-25 (Rs crore)	Average expenditure per person (Rs)
Mumbai	59,954	44,542
Pune	11,601	26,818
Kolkata	6,828	13,398
Hyderabad	7,937	11,628
Delhi	21,752	11,522
Chennai	7,867	11,421
Bengaluru	12,369	10,733

Note: 1. Cities arranged in descending order of average expenditure per capita. 2. Population estimate for 2020.

3. Expenditure shown is 'budget estimate'.

Source: Municipal budgets of respective cities; WorldPop

Bengaluru has...



...property tax as its biggest revenue source.
But this is insufficient to meet its public works spending, and so it relies big-time on grants.

Bengaluru earns most of its own revenues from property tax. But this is far from sufficient to meet its public works spending, and it thus relies on grants.



Receipts, 2022-23 actuals

1	Revenue: 3,571
1.1	Property Tax Income: 2,396
1.2	Health Cess: 359
1.3	Interest on Arrears of Property Tax: 185
2	Public Works (Mostly grants): 4,135
3	Town Planning and Regulation: 627
4	General administration: 451
5	Solid Waste Management: 332
6	Others: 57
	Total: 9,172

Payments, 2022-23 actuals

1	Public Works: 6,132
1.1	Capital expenses (GOI fund and GOK fund): 3,509
1.2	Discretionary & special development grants: 1,160
1.3	Repairs and maintenance: 949
1.4	Establishment expenses: 176
1.5	Capital expenses: 134
2	Solid Waste Management: 1,362
3	General administration: 462
4	Revenue: 303
5	Others: 908
	Total: 9,167

Source: Bruhat Bengaluru Mahanagara Palike (BBMP) budget 2024-25



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The Tech View



Photo: Noppasin, iStock



Undisputed #1, but Pockets of Challenges

Be it an ecosystem for startups, IT services or GCCs, Bengaluru is bigger, wider and deeper. But other cities are upping their tech game, from established ones (Delhi NCR and Greater Mumbai) to upcoming ones (Hyderabad).

Startups



The foundation

Bengaluru leads all Indian cities in...

Funding: Number of funded startups, total funding received and average funding per round

Angel investors: Number of investors and investments made by them

First-wave sectors: Funding received in sectors like e-commerce, edtech, SaaS and data analytics

Second-wave sectors: Startups and funding in sectors like AI, EVs and spacetech

Unicorns: Number, capital raised and combined valuation

Soonicorns: Number, capital raised and combined valuation

Jobs: Search interest for 'startup jobs'



The challenge

#2 in startups shutting down

Path to profitability: both unicorns and soonicorns show, on average, lower revenues and higher losses than Delhi NCR and Greater Mumbai peers

Global capability centres (GCCs)



The foundation

Bengaluru leads all Indian cities in...

- Number of GCCs
- Size of GCC-focused talent pool and gender diversity
- Share of GCC talent pool that is higher up in the value chain—engineering, research and development
- Zinnov sub-indices for talent and ecosystem and ease of doing business, and #2 for city attractiveness



The challenge

Other cities are also vying for the GCC business

Bengaluru is only #4 in Zinnov sub-index for cost, after Chennai, Pune and Hyderabad

IT services



The foundation

- Historical leader in IT services
- **Still going strong:** #1 in share of tier-1 office space leased between 2018-19 and 2022-23
- 6 of the top 20 IT companies in India are headquartered here
- **Leads in LinkedIn job listings in 7 key skillsets:** AI, NLP, robotics, blockchain, cyber security, cloud computing and quantum computing
- #1 in Google search interest for 'IT jobs'



The challenge

Other cities have made significant strides, and compete on infrastructure and talent pool

Companies are looking to diversify, to both other metros and smaller cities

Bengaluru is...

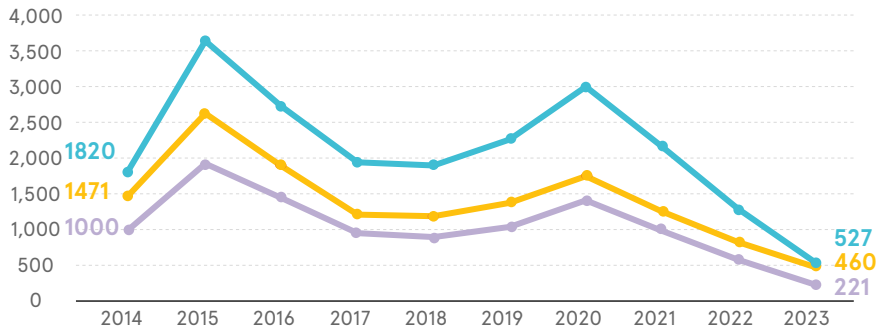
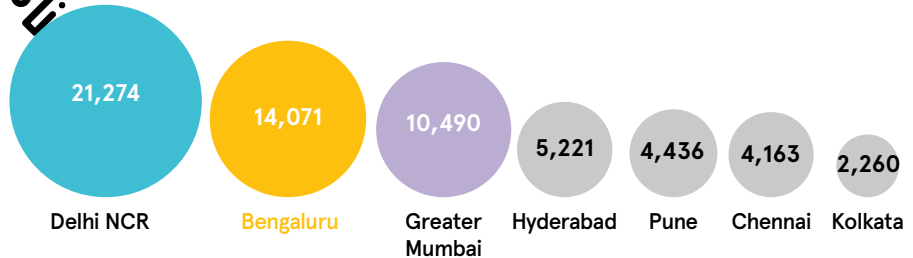


...#2 in the number of startups founded in the past decade, after Delhi NCR.

On average, in the past decade, about 1,400 startups were formed in Bengaluru each year. This is next only to Delhi NCR, which averaged about 2,100 startups a year.



Number of startups founded between 2014 and 2023



Source: Tracxn

Bengaluru does...

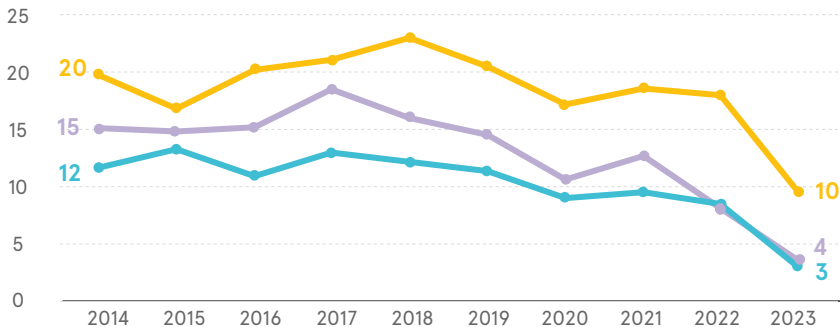
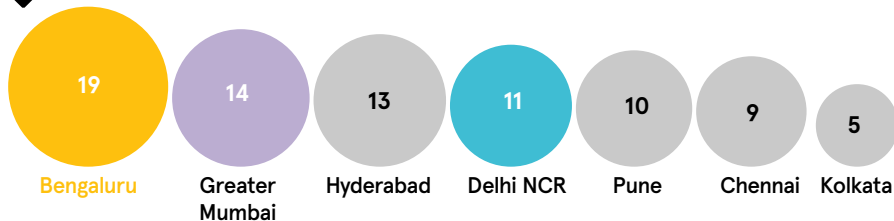


...significantly better in attracting startup funding. It has consistently led all cities in the proportion of startups funded by any category of investor.

About one in five startups formed in Bengaluru in the past decade is funded by investors, be it venture capital funds or angel investors. Bengaluru has retained that edge even in the funding winter of 2022 and 2023.



Share of startups formed between 2014 and 2023 that were funded by any kind of investor (%)



Source: Tracxn

Bengaluru is...

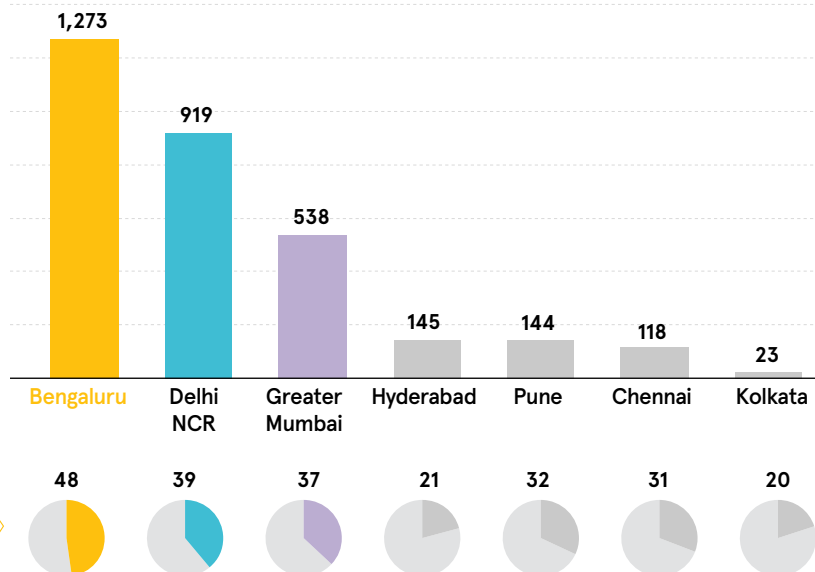


...#1 in the ability of startups based in the city to draw venture capital funding.

About half the funded startups in Bengaluru received VC funds—the biggest and most committed source of funds in this business stage. In all, 1,273 startups in Bengaluru received VC funds in the past decade.

Startups funded by VC funds

Number of startups funded by VC funds between 2014 and 2023



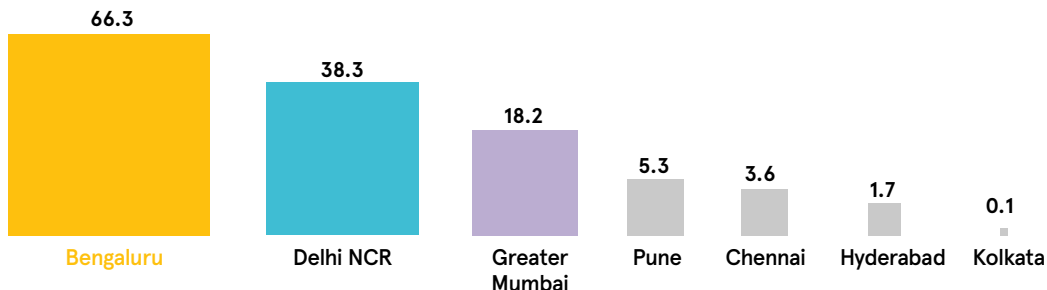
Source: Tracxn

Bengaluru has...



...received as much VC funds as Greater Mumbai, Delhi NCR, Pune and Chennai put together. It has led all cities in 7 of the last 10 years.

Equity funding received by startups from VC funds between 2014 and 2023 (\$ billion)



Equity funding (\$ million)

	Bengaluru	Delhi NCR	Greater Mumbai	Pune	Chennai	Hyderabad	Kolkata	Bengaluru rank
2014	2,959	2,750	239	69	179	78	16	1
2015	3,393	3,410	951	170	262	68	4	2
2016	1,525	1,864	520	165	102	82	3	2
2017	7,194	2,496	386	297	116	163	7	1
2018	5,014	3,698	819	290	274	73	3	1
2019	5,369	5,825	1,615	1,019	436	197	27	2
2020	5,406	2,640	1,518	331	313	198	10	1
2021	19,795	9,549	6,995	1,352	571	388	20	1
2022	12,087	4,329	3,490	1,379	1,192	363	17	1
2023	3,523	1,724	1,627	241	174	103	19	1

Source: Tracxn

Bengaluru is...



...#1 in average equity funding received from venture capital funds in a round. Its startups have consistently topped in number of funding rounds.

Between 2014 and 2023, Bengaluru received about 5,000 rounds of equity funding from VC funds. Each round averaged \$13.2 million.

Average equity funding per round by VC funds (\$ million, 2014 to 2023)



Number of rounds of equity funding by VC funds

	Bengaluru	Greater Mumbai	Delhi NCR	Pune	Chennai	Hyderabad	Kolkata
2014	214	79	159	22	22	24	5
2015	395	136	310	50	42	43	5
2016	401	118	319	59	23	60	7
2017	464	132	308	51	38	62	5
2018	490	156	342	53	42	60	10
2019	595	199	436	69	49	73	11
2020	614	182	422	63	52	47	8
2021	807	292	629	90	75	86	13
2022	699	247	509	79	80	81	13
2023	326	115	220	46	35	25	9
Total	5,005	1,656	3,654	582	458	561	86

Bengaluru rank
1
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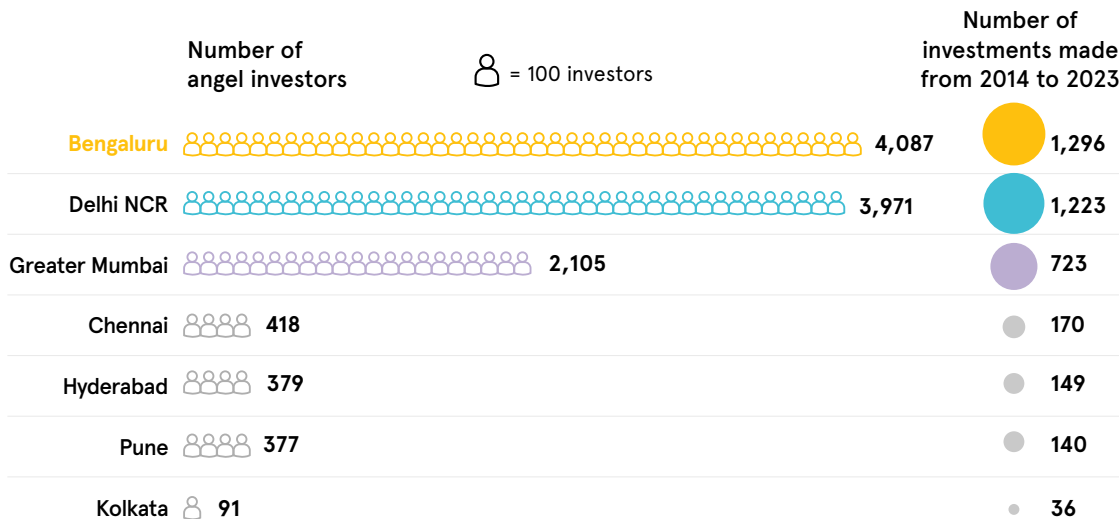
Source: Tracxn

Bengaluru had...



...the maximum angel investors and recorded the most angel investments made between 2014 and 2023.

On total wealth, Bengaluru trails Mumbai and Delhi NCR. Yet, it leads in angel investing, which is reflective of its status as India’s tech capital and its entrepreneurial, pay-it-forward culture.



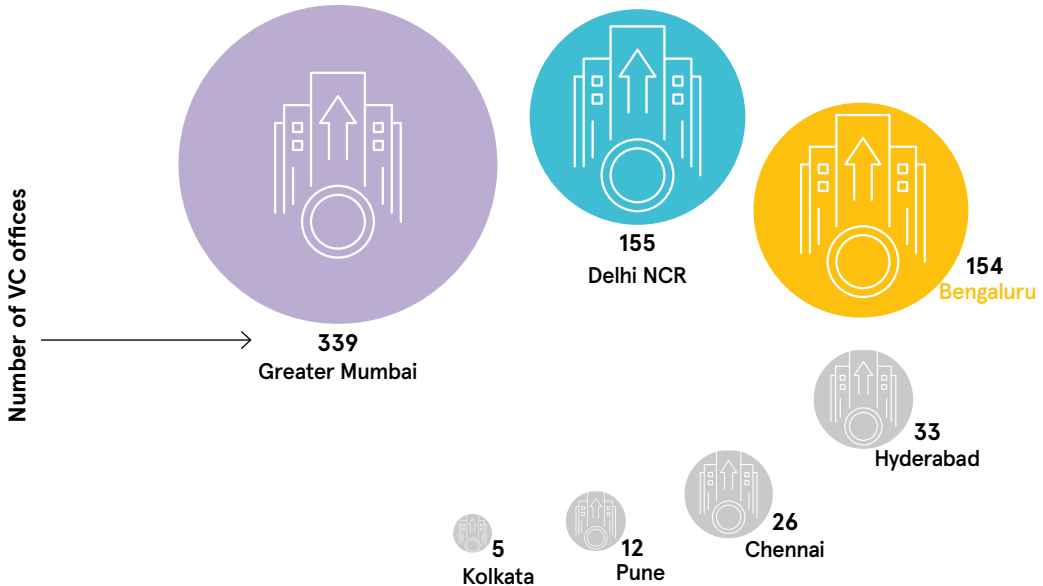
Note: Data as of December 2023.
Source: Venture Intelligence

Bengaluru is...



...#1 in startups from the city drawing VC investments. But it trails Greater Mumbai and Delhi NCR in count of VC offices.

Even though VC firms invest more money in startups based in Bengaluru, it's India's financial capital that remains the top draw for venture capital offices.



Source: Venture Intelligence

Bengaluru is...



...the leader in venture capital investments across key sectors, both in number of startups funded and amount invested.

Number of startups invested in by venture capital firms between 2015 and 2023

	E-commerce	Fintech	Edtech	SaaS	Healthcare	Artificial intelligence	Data analytics
Bengaluru	499	523	193	513	266	221	118
Delhi NCR	524	301	147	255	214	89	57
Greater Mumbai	351	316	80	129	148	48	29
Chennai	30	69	21	104	21	25	10
Hyderabad	21	23	22	61	40	21	5
Kolkata	3	7	6	8	7	12	3
Pune	63	47	16	77	33	22	18

Amount of capital raised between 2015 and 2023 (\$ million)

	E-commerce	Fintech	Edtech	SaaS	Healthcare	Artificial intelligence	Data analytics
Bengaluru	19,545	9,126	7,316	5,184	2,445	1,922	1,157
Delhi NCR	12,386	10,336	821	1,997	1,693	918	687
Greater Mumbai	6,271	3,427	1,674	1,893	2,894	368	817
Chennai	217	1,319	107	2,100	304	750	64
Hyderabad	96	89	154	713	180	206	6
Kolkata	8	25	12	36	49	49	5
Pune	2,821	1,265	88	1,369	102	206	496

Source: Venture Intelligence

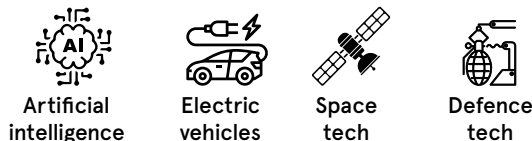
Bengaluru is...



...the leader in activity and funding in four startup sectors that promise to shape India's future in a big way.

In both artificial intelligence and electric vehicles, startups from Bengaluru have raised nearly twice as much VC funds as the next-best city.

Number of startups



	Artificial intelligence	Electric vehicles	Space tech	Defence tech
Bengaluru	1,624	177	32	9
Delhi NCR	1,164	333	11	18
Greater Mumbai	623	94	8	7
Chennai	339	58	8	3
Hyderabad	437	74	7	11
Pune	341	86	7	3
Kolkata	87	27	1	2
Bengaluru rank	1	2	1	3

VC funds raised (\$ million)

	Artificial intelligence	Electric vehicles	Space tech	Defence tech
Bengaluru	5,770	1,520	180	90
Delhi NCR	2,480	760	0	0.34
Greater Mumbai	2,060	653	5	0
Chennai	1,530	14	65	3
Hyderabad	684	33	105	0.30
Pune	2	34	0	0
Kolkata	8	2	0	0
Bengaluru rank	1	1	1	1

Source: Tracxn

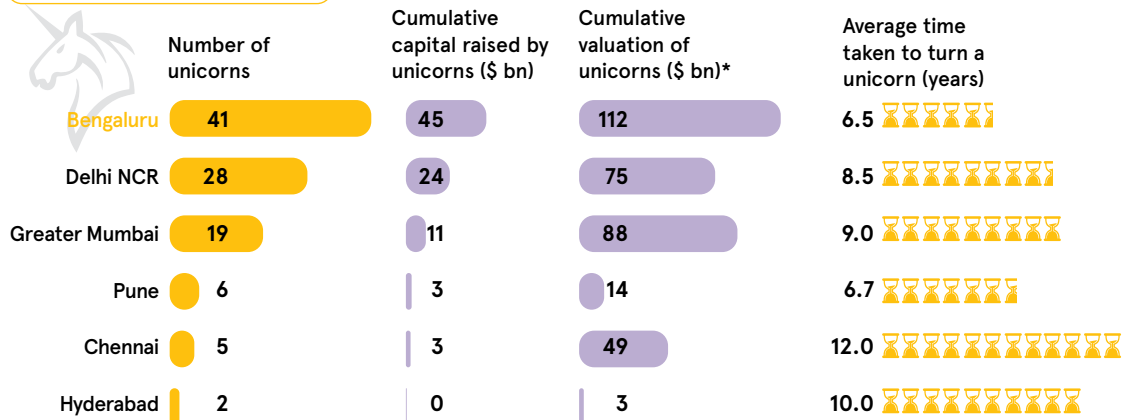
Bengaluru is...



...the headquarters for the maximum number of unicorns and is also the quickest in a startup turning into a unicorn.

As of December 2023, India had 101 unicorns, of which 41 were headquartered in Bengaluru. Bengaluru also leads with a cumulative valuation of \$112 billion, but on average valuation, it trails Greater Mumbai.

Unicorns by headquarters



Note: 1. Data as of December 2023, except cumulative valuations, which is at the time of the latest funding round. 2. There is no unicorn in Kolkata.

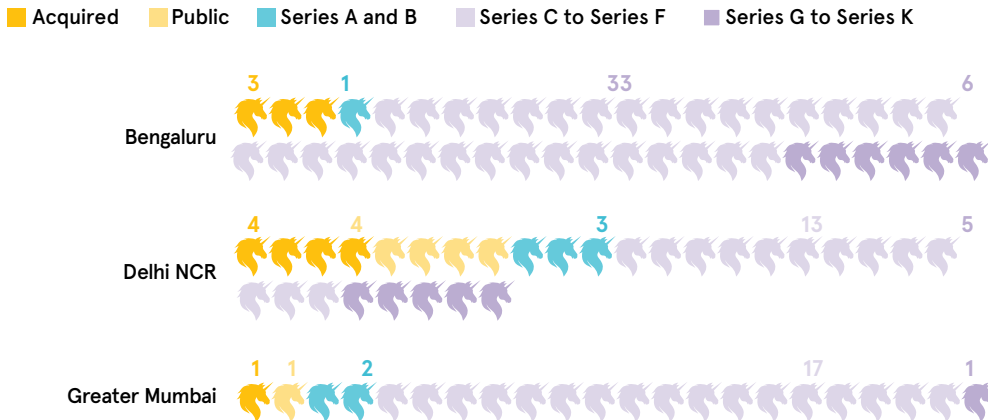
Source: Venture Intelligence

Bengaluru trails...



...Delhi NCR in unicorns offering exits to their investors by going public or by being acquired.

While Delhi NCR leads in acquisitions and going public, most of Bengaluru's unicorns are at the funding stage between Series C and Series F.



Acquired

PhonePe	Bengaluru
Bigbasket	Bengaluru
Flipkart	Bengaluru
Tata 1mg	Delhi NCR
Blinkit	Delhi NCR
Rivigo	Delhi NCR

Public

ShopClues	Delhi NCR
CitiusTech	Mumbai
Delhivery	Delhi NCR
Policybazaar	Delhi NCR
Zomato	Delhi NCR

Unfunded

Paytm	Delhi NCR
Nykaa	Mumbai
Freshworks	Chennai
ZeroDha	Bengaluru

Note: 1. Data as of March 15, 2024. Source: Tracxn

Bengaluru is...



...the leader in 'soonicorn'—companies tipped to join the \$1 billion club in the near future—and the capital raised by them.

On average, soonicorns from Bengaluru are able to raise more capital than their peers elsewhere. Bengaluru had 34 more soonicorns than Delhi NCR and they had raised about \$5.6 billion more in cumulative capital.

	Number of soonicorns	Total capital raised (\$ billion)	Average capital raised (\$ million)
Bengaluru	124	13.7	110
Delhi NCR	90	8.1	90
Greater Mumbai	65	5.9	91
Chennai	16	1.6	99
Hyderabad	14	0.8	57
Pune	8	0.8	94
Kolkata	1	0.0	8

Note: 1. Cities arranged in descending order of number of soonicorns. 2. The soonicorns in this dataset have a valuation range of \$80 million to \$945 million. 3. Data as of March 15, 2024.

Source: Tracxn

Bengaluru trails...

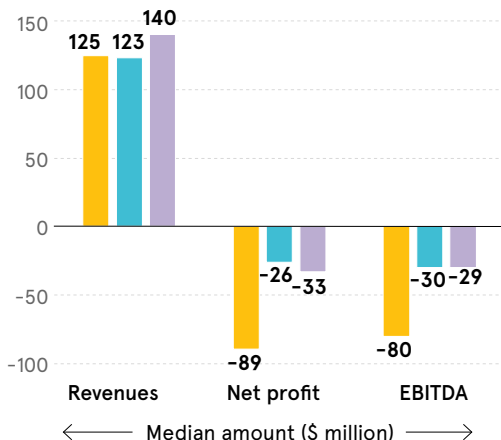


...both Delhi NCR and Mumbai in its unicorns and soonicorns reaching a path of profitability.

Although Bengaluru leads on the capital-raising side, its companies trail their peers in Delhi NCR and Greater Mumbai in average revenues. They also show higher average losses.

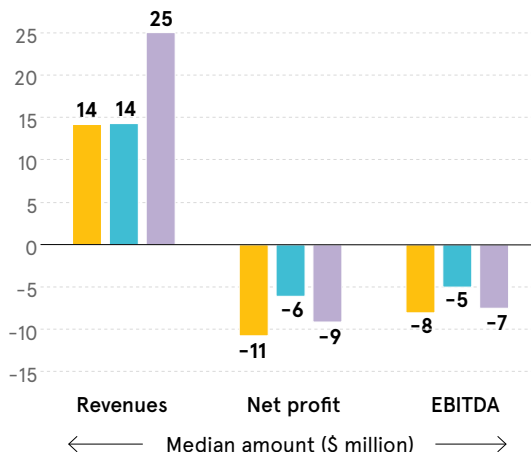
Unicorns

- Bengaluru (28 companies)
- Delhi NCR (12 companies)
- Greater Mumbai (16 companies)



Soonicorns

- Bengaluru (65 companies)
- Delhi NCR (50 companies)
- Greater Mumbai (30 companies)



Filtered for companies whose latest data available was for 2021-22 or 2022-23.

Source: Tracxn

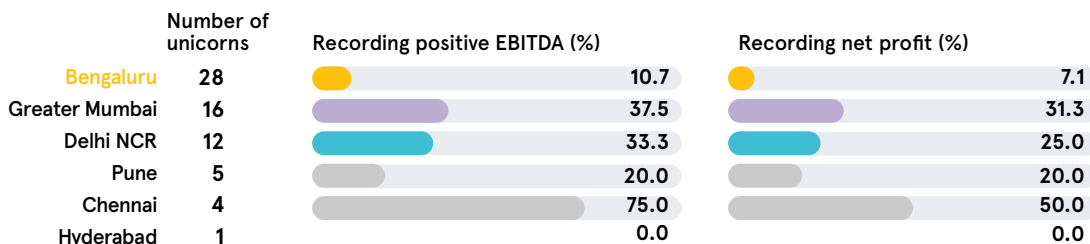
Bengaluru has...



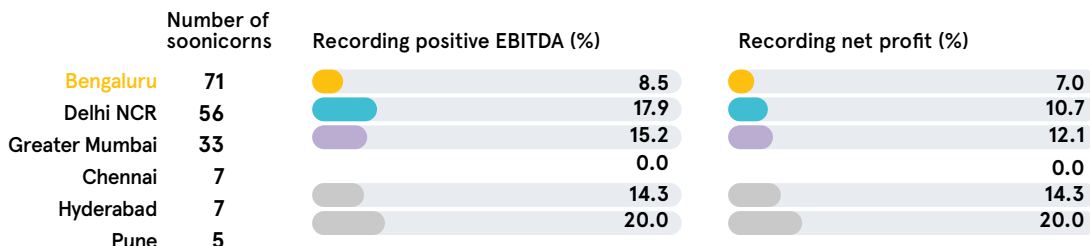
...a smaller share of unicorns and soonicorns showing some level of profitability than Delhi NCR and Greater Mumbai.

Be it unicorns or soonicorns, only about 1 in 10 companies in Bengaluru is profitable at the operational level. Delhi and Mumbai are doing significantly better on this front.

Unicorns



Soonicorns



Filtered for companies whose latest data available was for 2021-22 or 2022-23. Cities arranged in descending order of number of unicorns/soonicorns.

Source: Tracxn

Bengaluru has...

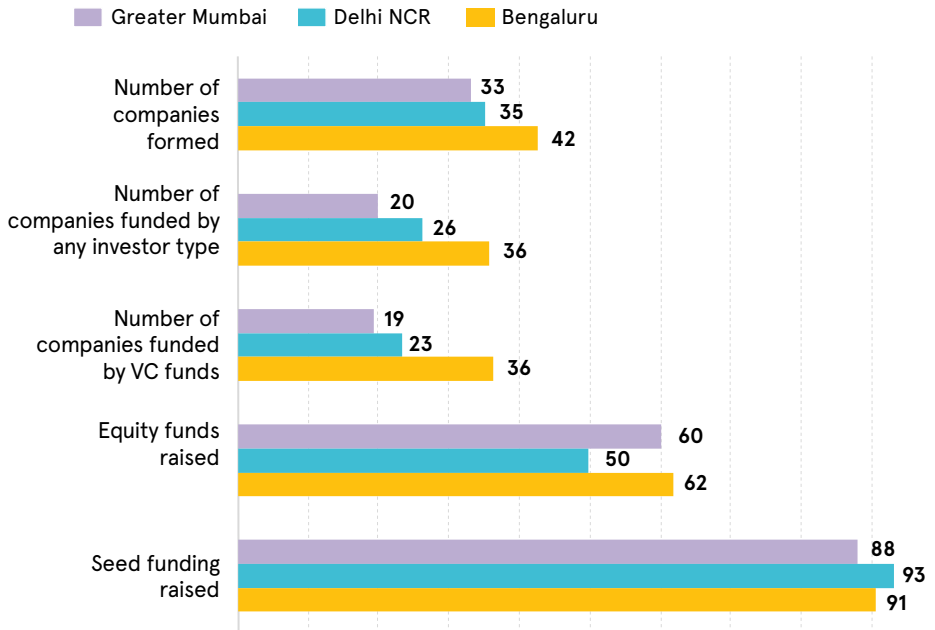


...withstood the drying up of VC funding in 2022 and 2023 better than other cities.

While all three leading Indian economic centres have seen a pullback in new startup activity in 2022 and 2023, Bengaluru is the least impacted.

Interestingly, while fewer companies were formed and funded, there was barely any pullback in seed funding.

2022 and 2023 as share of 2020 and 2021 (%) (Higher, the better)



Source: Tracxn

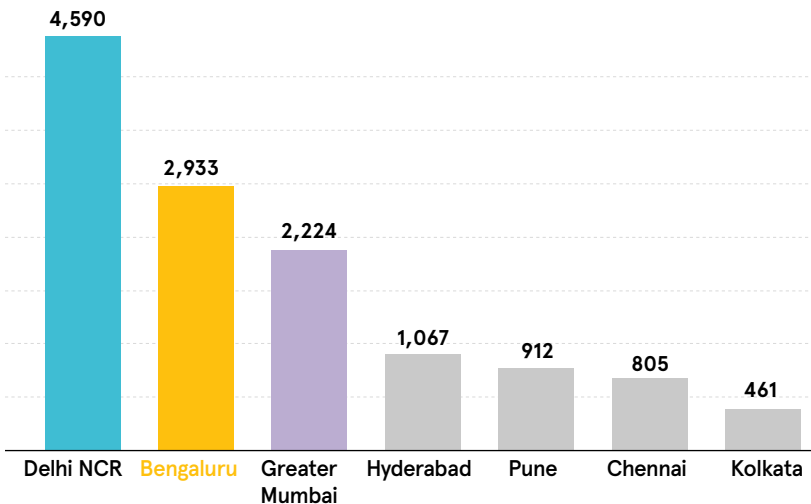
Bengaluru has...



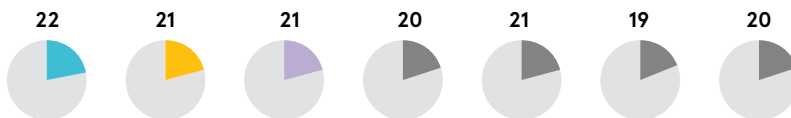
...the second-highest count of startups that have perished, but its attrition rate is similar to other cities.

In the past decade, Bengaluru has seen 2,933 startups shutter down in 10 sectors that lead startup activity. Yet, at roughly one in five, that's a similar ratio as other cities.

Number of deadpooled companies (2014 to 2023)



Deadpooled companies as share of startups founded between 2014 and 2023 (%)



Sectors considered: Consumer, enterprise applications, retail, edtech, healthtech, fintech, food and agriculture tech, high tech, media & entertainment, gig economy.

Source: Tracxn

Bengaluru is...



...#2 in terms of seeing companies fold up in most sectors of prominence, after Delhi NCR.

In 9 of the 10 sectors that lead in startup activity, Bengaluru has seen the second-highest number of companies shutter down. In high tech, it has seen the maximum companies close.

	Number of deadpooled companies (2014 to 2023)						
	Bengaluru	Delhi NCR	Greater Mumbai	Hyderabad	Pune	Chennai	Kolkata
Consumer	1,492	2,608	1,269	537	417	380	239
EdTech	316	545	207	135	101	87	64
Enterprise Applications	875	1,066	549	326	302	277	99
FinTech	210	349	200	77	71	72	38
Food & Agriculture Tech	280	346	196	86	97	90	40
Gig Economy	226	332	189	69	65	68	44
HealthTech	274	474	245	102	85	67	52
High Tech	212	163	75	64	63	51	19
Media & Entertainment	267	443	228	85	57	65	38
Retail	592	1,092	512	169	172	90	101

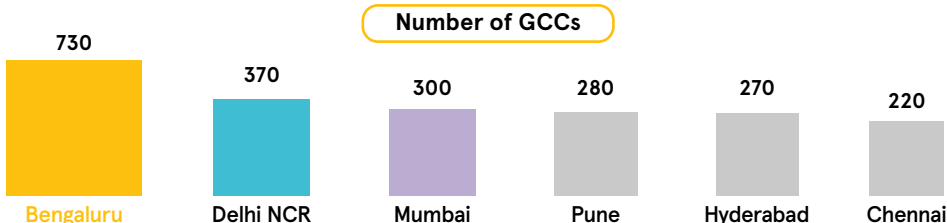
Note: At a sector level for deadpooled purposes, Tracxn classifies some companies under multiple sectors.
Source: Tracxn

Bengaluru has...



...twice as many GCCs as the number 2 city and it scores high on most parameters that matter in this business decision.

Also called 'captives', GCCs are offshore units of multinational corporations—for example, in January 2024, Boeing opened a engineering and technology centre in Bengaluru. The city remains the biggest draw in India for GCCs, though it is becoming expensive.



Rank	Overall	City attractiveness	Talent & ecosystem	Ease of doing business	Cost index
1	Bengaluru	Mumbai	Bengaluru	Bengaluru	Chennai
2	Delhi NCR	Bengaluru	Delhi NCR	Delhi NCR	Pune
3	Mumbai	Delhi NCR	Mumbai	Mumbai	Hyderabad
4	Hyderabad	Pune	Hyderabad	Hyderabad	Bengaluru
5	Pune	Hyderabad	Pune	Pune	Delhi NCR
6	Chennai	Chennai	Chennai	Chennai	Mumbai

Sub-parameters: City attractiveness: cost of living, pollution, ease of living, safety, climate, connectivity, ease of doing business, IT, health and education infrastructure. Talent & ecosystem: GCC installed talent, fresh talent, and start-up and GCC ecosystem. Ease of doing business: government policies, internet infrastructure and commute. Cost index: Infrastructure, people and regulatory cost.

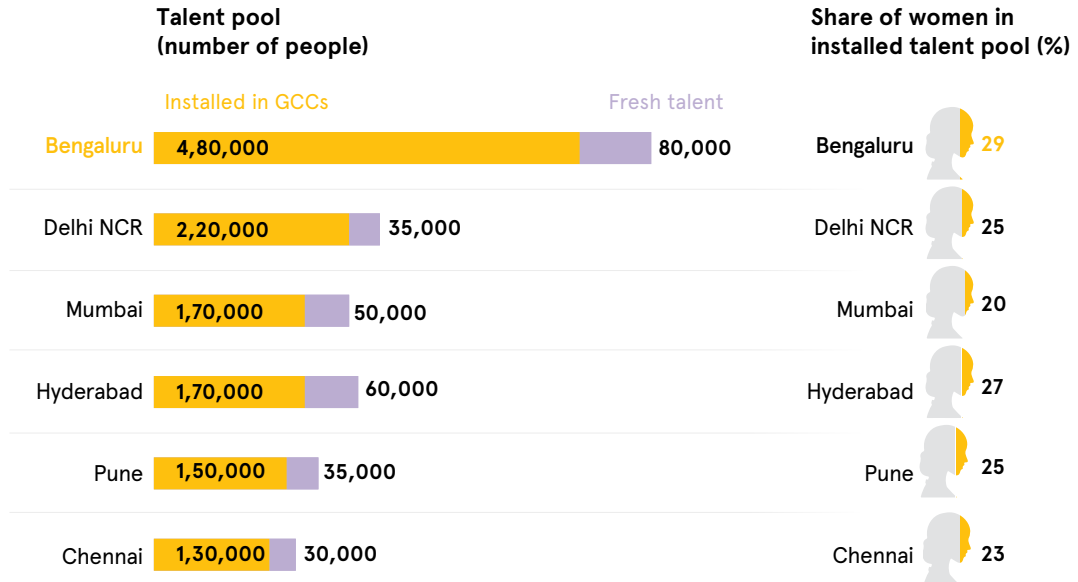
Source: Zinnov report titled Tier-I City Analysis, October 2022

Bengaluru has...



...a talent pool for GCCs that is more than twice that of the number 2 city. And it also has the best gender mix among the six cities.

Bengaluru's headstart on GCCs makes it a repository of talent in this space. It also draws fresh talent in big numbers, though Hyderabad is catching up on that count.



Installed talent: Engineering, research and development, information technology and business process management roles.
 Fresh talent: with a background in computer science, IT and allied branches. The Zinnov report gives a 10,000 range for fresh talent, and the upper end of the band is shown here.

Source: Zinnov report titled Tier-I City Analysis, October 2022

Bengaluru has...

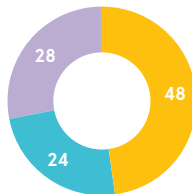


...a GCC talent pool that leads in share of engineering, research and development roles—essentially, top-end work in GCCs.

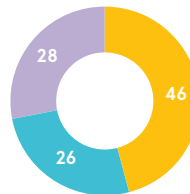
Nearly half of Bengaluru's GCC talent pool is involved in engineering, research and development roles, which is highest in the value chain. By comparison, for Delhi NCR, which is #2 by number of GCCs, that figure is 34%.

Breakup of GCC installed talent pool (%)

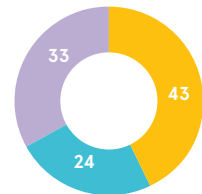
- Engineering, research and development
- Information technology
- Business process management



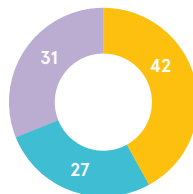
Bengaluru



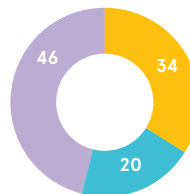
Pune



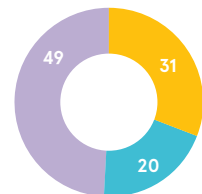
Chennai



Hyderabad



Delhi NCR



Mumbai

Source: Zinnov report titled Tier-I City Analysis, October 2022

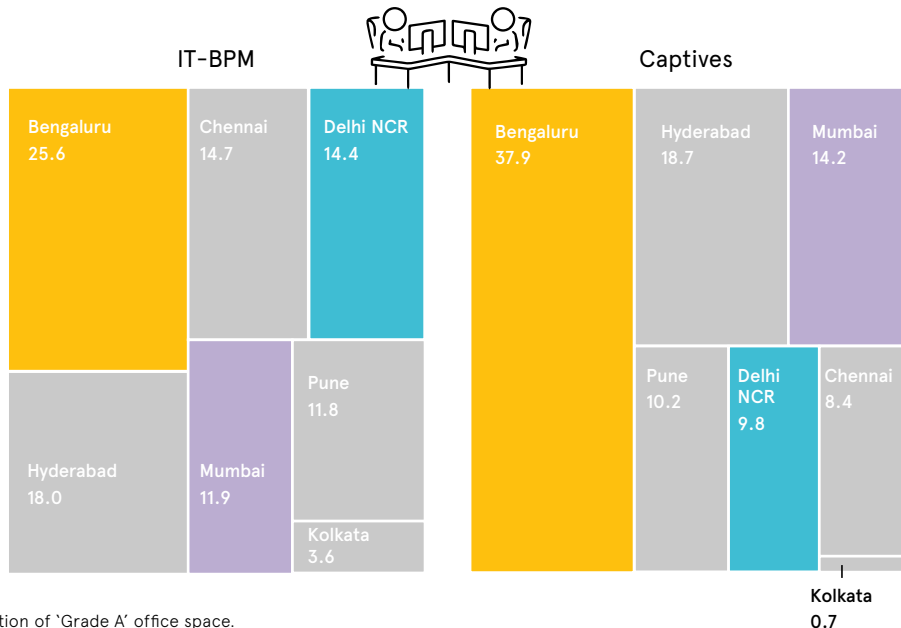
Bengaluru is...



...the leader in new office space leased in recent years by both the IT-BPM sector and offshore units of multinationals.

Although growth in IT-BPM is slowing and other cities are catching up, Bengaluru still accounted for a leading 26% of new office space leased between 2018-19 and 2022-23. And in the captives segment, which is growing faster, the city led with a 38% share.

Share of gross lease volume of 'Grade A' office space between 2018-19 and 2022-23 (%)



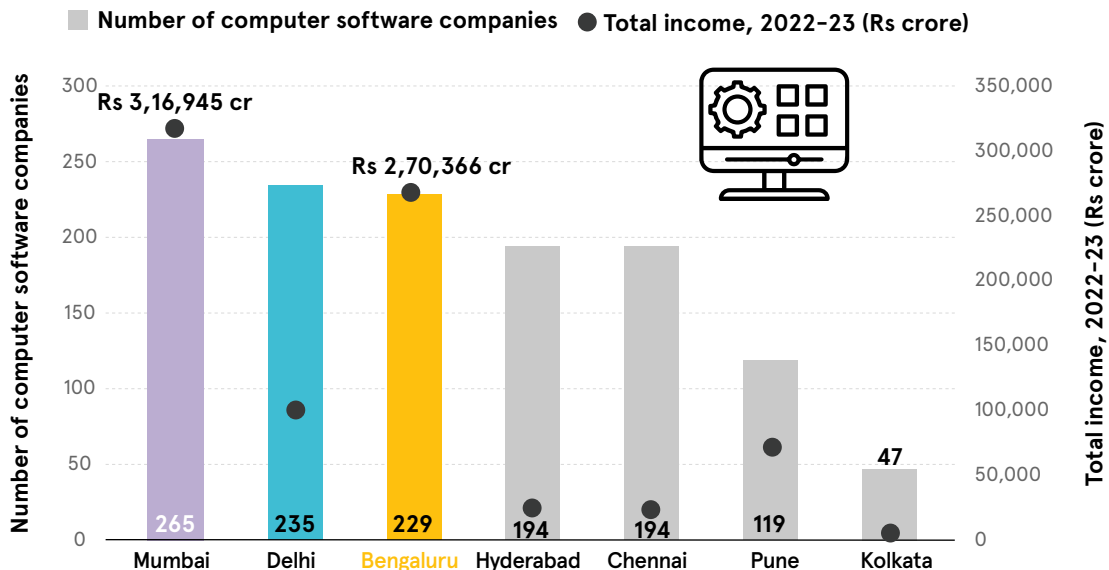
Note: See Page x for definition of 'Grade A' office space.
Source: Cushman & Wakefield

Bengaluru is...



...#3 in terms of number of companies in the business of computer software that are registered in the city and #2 in revenues.

The place of registration represents a company's home base, though large ones invariably outgrow it. While Bengaluru has Infosys and Wipro, Mumbai has TCS. The three account for nearly half the combined revenues of the Indian IT sector.



Cities arranged in descending order of number of companies.

Source: CMIE

Bengaluru has...



...six companies registered in the city in the list of top 20 IT companies, and leads all Indian cities on this count.



The top 20 Indian IT companies account for about 85% of the sector's revenues. As many as six of these are registered in Bengaluru. Delhi NCR has five, and Mumbai and Pune four apiece.

Company	City of registration	Total income, 2022-23 (Rs crore)
Tata Consultancy Services Ltd.	Mumbai	1,96,535
Infosys Ltd.	Bengaluru	1,28,520
Wipro Ltd.	Bengaluru	70,578
HCL Technologies Ltd.	Delhi	47,309
Tech Mahindra Ltd.	Mumbai	43,786
Ltimindtree Ltd.	Mumbai	32,585
Capgemini Technology Services India Ltd.	Pune	28,417
Amazon Development Centre (India) Pvt. Ltd.	Bengaluru	23,408
JP Morgan Services India Pvt. Ltd.	Mumbai	18,562
Microsoft India (R&D) Pvt. Ltd.	Delhi	14,819
Amazon Internet Services Pvt. Ltd.	Delhi	12,924
Wells Fargo Intl. Solutions Pvt. Ltd.	Hyderabad	10,783
HSBC Software Devp. (India) Pvt. Ltd.	Pune	10,383
Bosch Global Software Technologies Pvt. Ltd.	Bengaluru	10,219
Mphasis Ltd.	Bengaluru	9,589
Barclays Global Service Centre Pvt. Ltd.	Pune	9,100
Ericsson India Global Services Pvt. Ltd.	Delhi	6,722
EIT Services India Pvt. Ltd.	Bengaluru	5,416
Persistent Systems Ltd.	Pune	5,207
Coforge Ltd.	Delhi	4,818

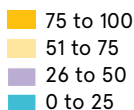
Source: CMIE

Bengaluru is...










...a leader by a long way in supply of jobs in 7 key current and emerging technologies.

In 7 key top-end technologies that are currently in demand or will be in demand in the new future, LinkedIn showed more job listings for Bengaluru than the other 6 cities. In most other cities, corresponding job postings did not even amount to half of Bengaluru.



Number of job listings on LinkedIn for skillset, rebased (maximum for skillset = 100)

	Artificial intelligence 	Natural language processing 	Robotics 	Blockchain 	Cyber security 	Cloud computing 	Quantum computing 
Bengaluru	100	100	100	100	100	100	100
Greater Mumbai	46	39	37	42	47	37	29
Hyderabad	45	41	34	41	41	49	13
Pune	33	28	32	44	35	33	13
Delhi NCR	42	37	34	68	38	33	8
Chennai	36	31	38	30	30	29	8
Kolkata	29	23	19	28	13	18	8

Accessed on February 7, 2024.

Source: LinkedIn

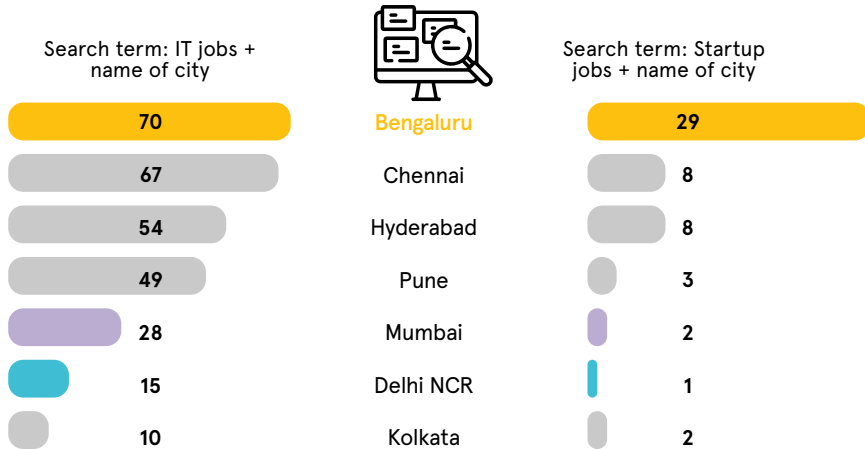
Bengaluru is...



...still the most popular city in online search interest for IT and startup jobs.

On Google, Internet users from across India are searching for IT jobs and startup jobs in Bengaluru more than in any other city. In IT jobs, Chennai and Hyderabad run close. But in startup jobs, Bengaluru has a wide lead.

Average search interest in the past year



Note: Data for searches originating from users in India and for 12-month period to March 20, 2024. For each search term, the numbers represent search interest relative to the highest point on the chart during this period. A value of 100 is the peak popularity, and all other values are calibrated to it.

Source: Google Trends

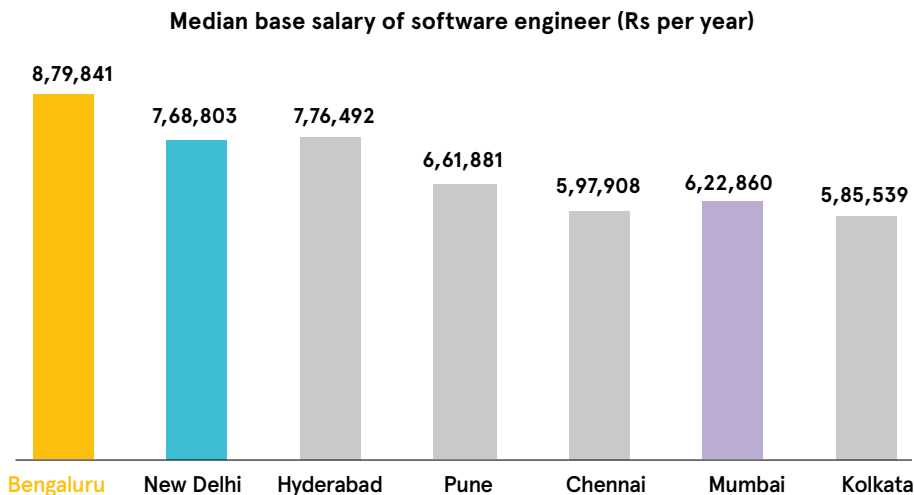
Bengaluru is...



...#1 in base salaries earned by IT professionals, with an average markup of about 13% over New Delhi.

According to crowd-sourced website

Payscale, the base salary of a software engineer in Bengaluru was 13% to 33% higher than their peers in other cities.



Note: Data for 2024, as of 23 May 2024.

Source: Payscale.com

Bengaluru is...

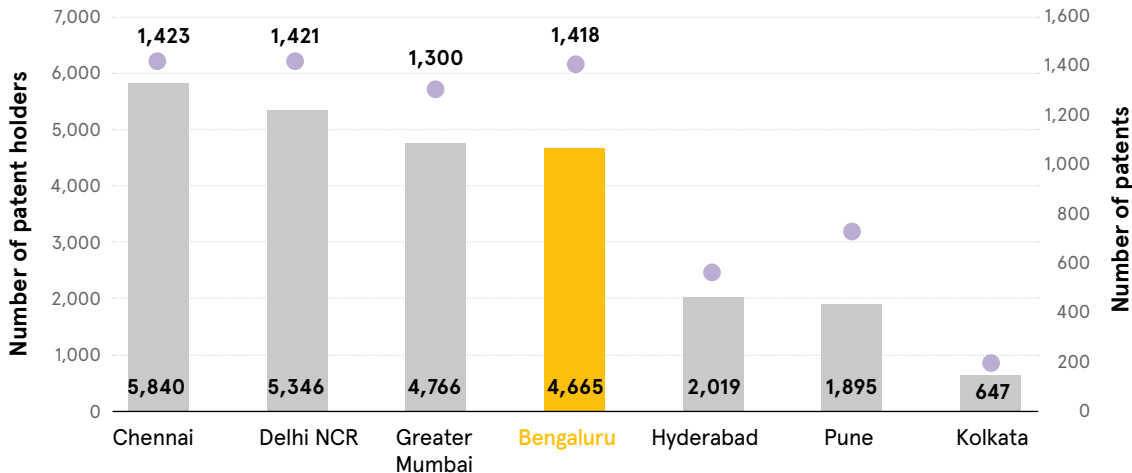


...up there with other leading Indian cities on number of patents issued between 2020 and 2023.

Between 2020 and 2023, the Indian Patent Office issued patents to about 52,000 applicants, most of whom applied on a joint basis. About 4,650 of them were from Bengaluru, across 1,418 patents.

Patent activity with Indian Patent Office, 2020 to 2023

■ Number of patent holders ● Number of patents



Source: Indian Patent Office

Bengaluru was...



...the leader among Indian cities in patents issued in computer science, electronics and communications.

There are several sectors where Bengaluru is leading all Indian cities in number of patents granted between 2020 and 2023. It is number 1 in 3 sectors and number 2 in another 3 sectors.

—— Number of patents granted by Indian Patent Office, 2020 to 2023 ——

	Bengaluru	Chennai	Delhi NCR	Greater Mumbai	Hyderabad	Kolkata	Pune	Bengaluru rank
Computer science	503	262	315	305	139	83	186	1
Electronics	473	351	230	220	100	69	119	1
Communication	441	142	166	101	81	22	49	1
Electrical	646	450	647	283	174	24	138	2
Physics	247	301	211	178	82	41	74	2
Biotechnology	89	83	58	117	58	31	34	2
Bio-chemistry	57	17	42	95	32	18	21	2
Chemical	810	769	1150	1484	754	156	431	3
Bio-medical engineering	237	459	281	194	97	37	83	3
Polymer technology	124	63	148	320	49	33	13	3
Textile	57	66	54	63	10	1	13	3
Mechanical engineering	890	2614	1767	1149	384	104	644	4
Metallurgy	38	81	45	89	21	6	23	4
Civil	20	131	164	137	18	9	48	5

Table filtered for sectors where at least 100 patents were granted between 2020 and 2023. Sectors arranged by Bengaluru rank in sector.
Source: Indian Patent Office



unb♥xingBLR



Chapter 6

unboxingBLR

The Global View



Photo: Shylendrahoode, iStock



Capabilities Beyond Cost

Bengaluru first made its mark on the world as an outsourcing centre, doing backend things for the world at a fraction of their cost. Even as it retains its cost advantage, with an expanding and maturing ecosystem, it is making a strong case for itself as a global technology hub.

The Foundation



Startups

- Bengaluru has been consistently ranked between 15 and 20 in the Startup Genome rankings of global startup ecosystems since 2015
- It rubs shoulders with Paris, Berlin and Tel Aviv in venture capital funding, ecosystem value and unicorns
- Its median VC seed round is the smallest, an indicator of its lower cost of starting up
- Offers the fastest exit
- Ranked high in number of LinkedIn job listings in artificial intelligence (#5) and natural language processing (#3)

The Foundation



Cost

- Its cost advantage remains: lowest cost of engineers and office rent, plus lowest cost of living
- Despite rising costs, India remains the cheapest to set up a 100-member global capability centre, aided by the second-largest talent pool



Research

- India was ranked #6 in patents issued in 2022
- In India, Bengaluru, despite its smaller university base, was ranked #4 in patents issued between 2020 and 2023
- Bengaluru is #1 in patents issued in computer science, electronics, communication, and is #2 in electrical and physics



The challenge

Gap to leaders:

Bridging the significant distance to leaders like Silicon Valley and Beijing on venture capital metrics

Concentration:

Startup value is concentrated at the top, and could do with more broad-basing

Revenue and profitability path:

In SaaS, for example, it is ranked #4 in funding (out of 13 cities), but #9 in employee base and #13 in revenue per employee

More institutes of excellence:

Thin and low presence in 2024 QS World University Rankings. IISc is third-highest in India, ranked 225

Infrastructure:

Traffic is a dampener to moving distances, and a more sprawling metro network will help

Bengaluru was...



...placed #20 in a ranking of global startup ecosystems in 2023. In previous editions, dating back to 2015, it was ranked between 15 and 20.

Global Startup Ecosystem Ranking 2023

Score (out of 10) (Higher, the better)

■ 1 to 2 ■ 3 to 5 ■ 6 to 7 ■ 8 to 10

Overall ranking	Ecosystems	Performance	Funding	Connected-ness	Market reach	Knowledge	Talent + experience
1	Silicon Valley	10	10	10	10	9	10
2 (tied)	London	9	10	10	10	6	10
2 (tied)	New York City	10	10	10	10	6	10
4	Los Angeles	10	10	8	9	6	9
5	Tel Aviv	9	9	9	10	5	8
6	Boston	9	9	8	9	6	10
7	Beijing	10	4	3	8	10	10
8	Singapore	7	9	9	9	1	7
9	Shanghai	9	3	1	6	10	9
10	Seattle	8	6	4	8	7	8
11	Washington DC	8	5	2	9	3	8
12	Seoul	7	8	7	1	8	7
13	Berlin	6	8	9	5	1	6
14	Amsterdam-Delta	6	7	10	6	1	6
15	Tokyo	4	7	7	1	8	9
16	San Diego	8	2	1	8	7	7
17	Toronto-Waterloo	5	8	8	5	2	6
18	Paris	1	9	9	7	1	8
19	Chicago	7	5	6	6	1	7
20 (tied)	Bengaluru	4	8	8	1	7	3
20 (tied)	Sydney	5	7	7	5	1	5

Source: The Global Startup Ecosystem Report 2023, Startup Genome

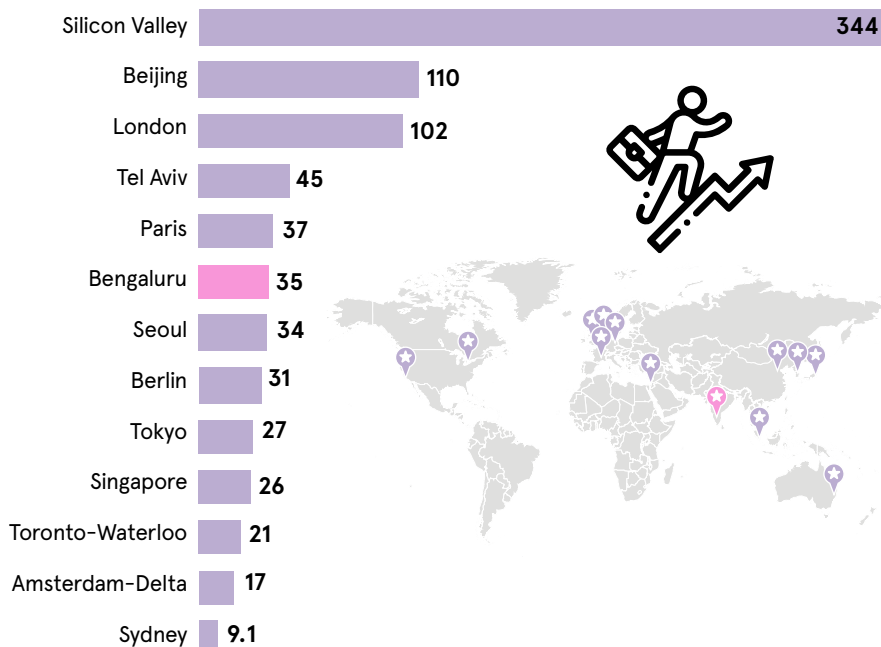
Bengaluru is...



...ranked #6 in VC funding among a set of 13 global cities, and it is punching above its weight relative to its overall ranking.

Between 2018 and 2022, Bengaluru received about \$35 billion in venture capital funding. In size, it's part of a bunch that includes Berlin, Seoul, Paris and Tel Aviv. But the gap to leaders is immense—it's only about one-third of London and Beijing, and about one-tenth of Silicon Valley.

Total venture capital funding in tech startups from 2018 to 2022 (\$ billion)



Note: The 13 cities in this set are drawn from the top 20 cities in the 2023 Startup Genome ranking of global startup ecosystems. Cities in the top 20 that had multiple entries from the same country have been excluded.

Source: The Global Startup Ecosystem Report 2023, Startup Genome

Startups: Valuations

Bengaluru does...



...well when its startups are measured on exits and valuations. It's also growing faster than the average rate on this metric.

In terms of ecosystem value, Bengaluru is #6 among this set of 13, but it is about 1/20th of Silicon Valley, 1/5th of Beijing and about half of London.

But it's #5 in growth and has grown faster than Beijing, Silicon Valley and London.



Notes: 1. See note on Page 159 for basis of city selection. 2. Ecosystem value measures economic impact. It is calculated as the value of exits and startup valuations between the second half (H2) of 2020 and 2022. Ecosystem value growth is calculated based on companies founded in the ecosystem in H2 2018-2020 versus H2 2020-2022.

Source: The Global Startup Ecosystem Report 2023, Startup Genome

Bengaluru was...



...ranked towards the lower end in how much early-stage funding it has received, but it fared well on how this class of funding grew in the latest year.

Of the 13 cities in our set, Bengaluru was ranked #8 in the total amount its startups raised via seed and Series A funding.

However, it leads in how this metric has grown, along with Berlin, Singapore and Sydney.

Total early-stage funding (seed + Series A) (H2 2020–2022, \$ billion)		Growth scale: 1 (low) to 10 (high)
44	Silicon Valley	5
18	London	7
8.3	Tel Aviv	5
6.9	Paris	4
6.7	Beijing	1
5.8	Berlin	8
5.7	Singapore	8
4	Bengaluru	8
3.9	Amsterdam-Delta	4
3.8	Toronto-Waterloo	2
3.6	Seoul	2
2.9	Tokyo	1
2.2	Sydney	8

Notes: 1. See note on Page 159 for basis of city selection. 2. Growth in 2021-22 vs 2020-21.
Source: The Global Startup Ecosystem Report 2023, Startup Genome

Bengaluru is...



...cheaper to start up. Its average seed round was about one-fourth of Beijing and Tel Aviv, and about one-third of Silicon Valley.

In our set of 13 cities, Bengaluru was ranked #12 in size of median seed round and #8 in size of median Series A round.

Its median seed round was also smaller than the global average.

Median seed round (\$ million)		Median Series A round (\$ million)
3.10	Beijing	10
2.80	Tel Aviv	2.9
2.10	Silicon Valley	10
1.60	Paris	7.5
1.50	Berlin	6.3
1.00	Sydney	14
1.00	Singapore	3.4
0.90	Toronto-Waterloo	9.1
0.89	London	8.5
0.84	Seoul	6
0.77	Amsterdam-Delta	15
0.75	Bengaluru	6.9
0.75	Tokyo	6.1

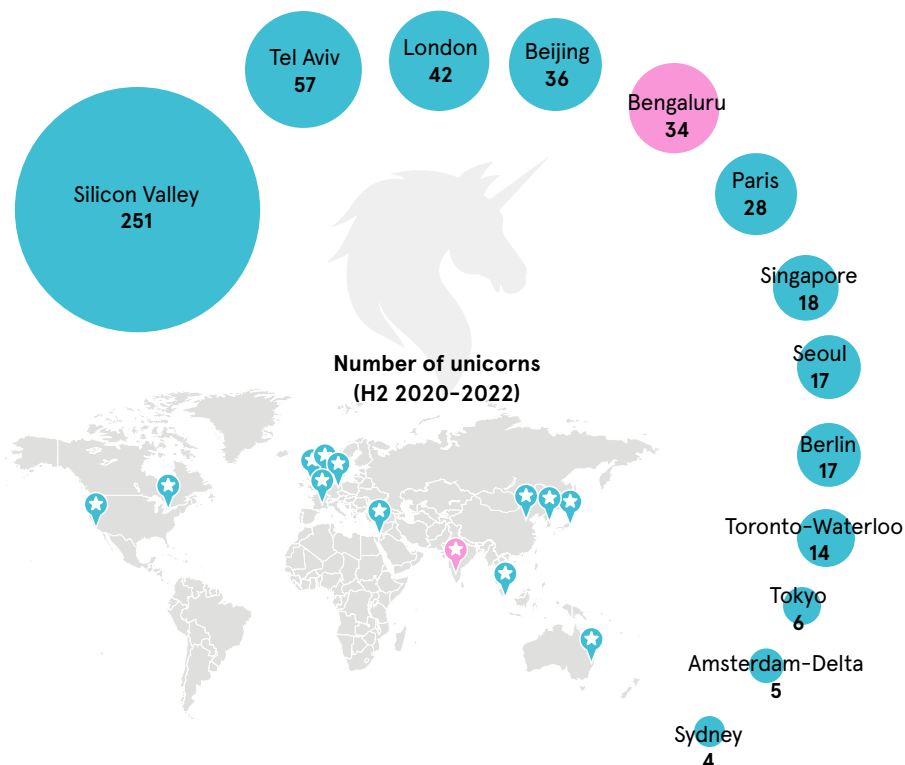
Notes: 1. See note on Page 159 for basis of city selection. 2. Data from second half of 2020 to second half of 2022.
Source: The Global Startup Ecosystem Report 2023, Startup Genome

Bengaluru was...



...ranked #5 on count of unicorns. Its unicorn count was twice that of Singapore, Seoul and Berlin.

On average, the startup ecosystems ranked by Startup Genome had 4 unicorns. Bengaluru had 34, and it was within touching distance of Beijing and London. In the 2021 report, its distance to Beijing was 21 (57 vs 36). In 2022, it reduced it to 2 (36 vs 34).



Notes: 1. See note on Page 159 for basis of city selection.

Source: The Global Startup Ecosystem Report 2023, Startup Genome

Bengaluru sees...



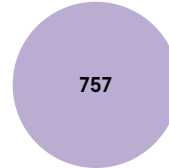
...its unicorns wield a significantly greater influence on its collective ecosystem value than Beijing, which suggests a concentration of value at the top.

In 2022, Bengaluru almost matched Beijing in count of unicorns (36 vs 34). However, in terms of total ecosystem value (sum of exits and valuations of all startups), Bengaluru was about one-fifth that of Beijing. In other words, ecosystem value in Beijing is more spread out across startups than Bengaluru.

**Number of unicorns
(H2 2020–2022)**



**Ecosystem value
(H2 2020–2022) (\$ billion)**



Notes: Ecosystem value measures economic impact. It is calculated as the value of exits and startup valuations between the second half (H2) of 2020 and 2022.

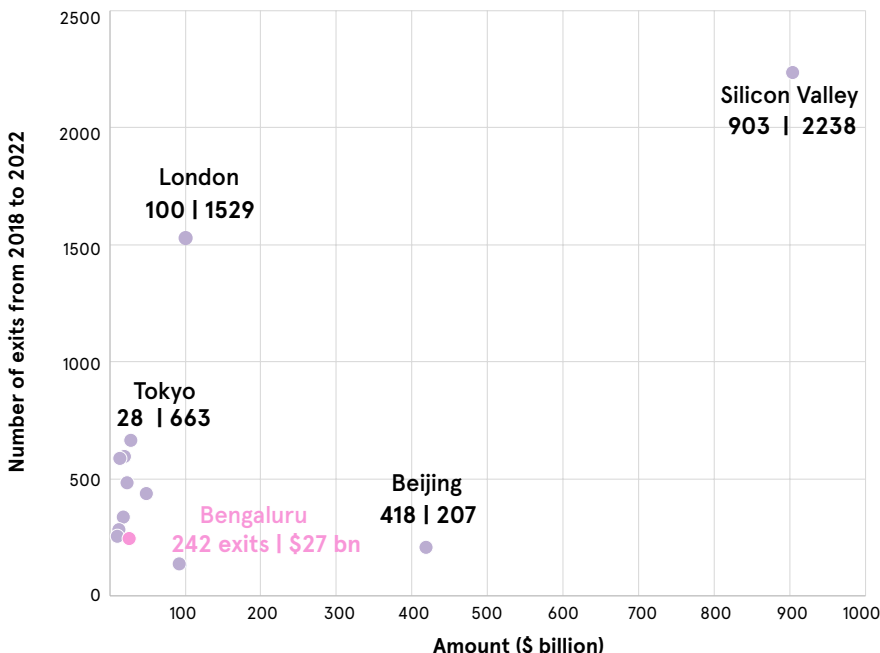
Source: The Global Startup Ecosystem Report 2023, Startup Genome

Bengaluru has...



... work to do in startups reaching points of fruition. The city was among the bottom in terms of number of exits, but fared slightly better in value terms.

Bengaluru is #7 in amount realised from startup exits, but #11 in the count of exits, again suggesting concentration in value at the top. Only Beijing and Seoul had fewer exits than Bengaluru.



Notes: 1. See note on Page 159 for basis of city selection.

Source: The Global Startup Ecosystem Report 2023, Startup Genome

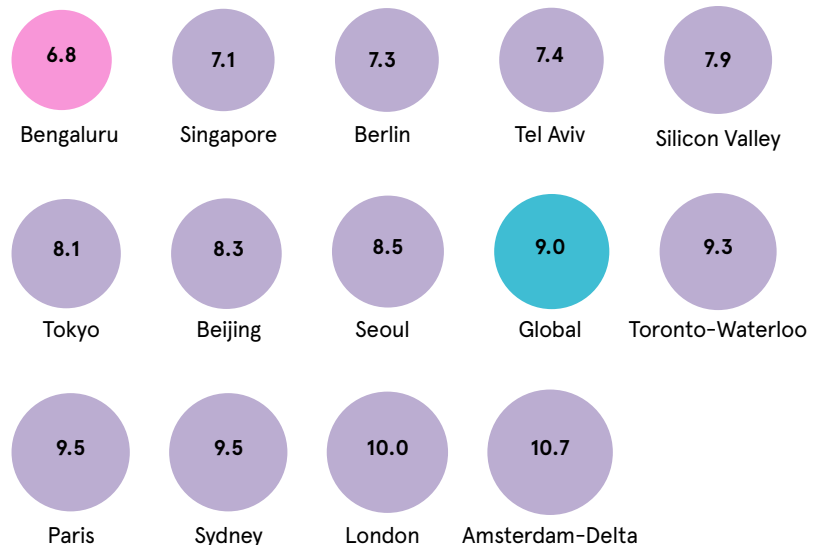
Bengaluru has...



...been trailing on various metrics related to exits. But on the exits it did have, its time to exit was the shortest.

Of the 13 cities in our set, startups in Bengaluru were the quickest to see an exit (6.8 years), against 7.9 years for Silicon Valley and 8.3 years for Beijing.

Time to exit (2018-2022) (Number of years)



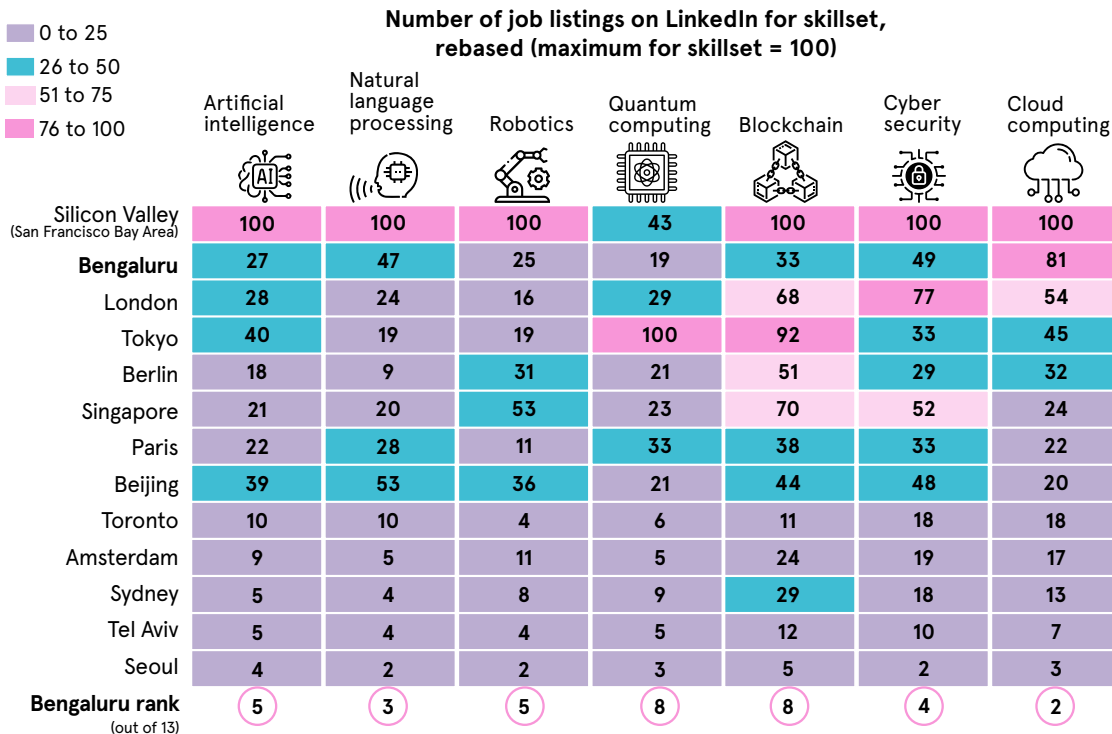
Notes: 1. See note on Page 159 for basis of city selection.

Source: The Global Startup Ecosystem Report 2023, Startup Genome

Bengaluru does...



...reasonably well on job demand in 5 of the 7 key IT job profiles that are expected to shape the future.



Accessed on March 14, 2024. Source: LinkedIn

Bengaluru is...



...ranked high in terms of funding received by SaaS companies and staff employed, but is ranked low on count of companies and revenues.

Revenues per employee for SaaS (software as a service) companies in Bengaluru was the lowest among the 13 cities. It's about one-third the next best and about one-tenth of the best.

Software-as-a-service (SaaS)

	Companies	Employees	Revenues (\$ billion)	Funding (\$ billion)	Revenue per employee (\$)
Sydney	126	5,213	1.00	1.30	1,91,987
Amsterdam	103	7,000	1.30	2.40	1,85,714
San Francisco	1,120	1,89,526	23.15	73.03	1,22,165
Toronto	280	18,164	1.71	4.92	94,131
Paris	370	30,300	2.70	9.90	89,109
London	834	52,081	4.46	12.07	85,720
Seoul	29	1,200	0.10	0.43	80,917
Berlin	240	15,209	1.20	3.00	78,966
Singapore	194	14,749	1.10	1.91	74,717
Tokyo	86	5,000	0.33	2.20	65,320
Tel Aviv	124	7,017	0.45	1.76	64,101
Beijing	101	9,100	0.57	5.20	62,363
Bengaluru	82	35,737	0.75	5.50	21,054

Bengaluru rank (out of 13)

- Companies: 12
- Employees: 3
- Revenues: 9
- Funding: 4
- Revenue per employee: 13

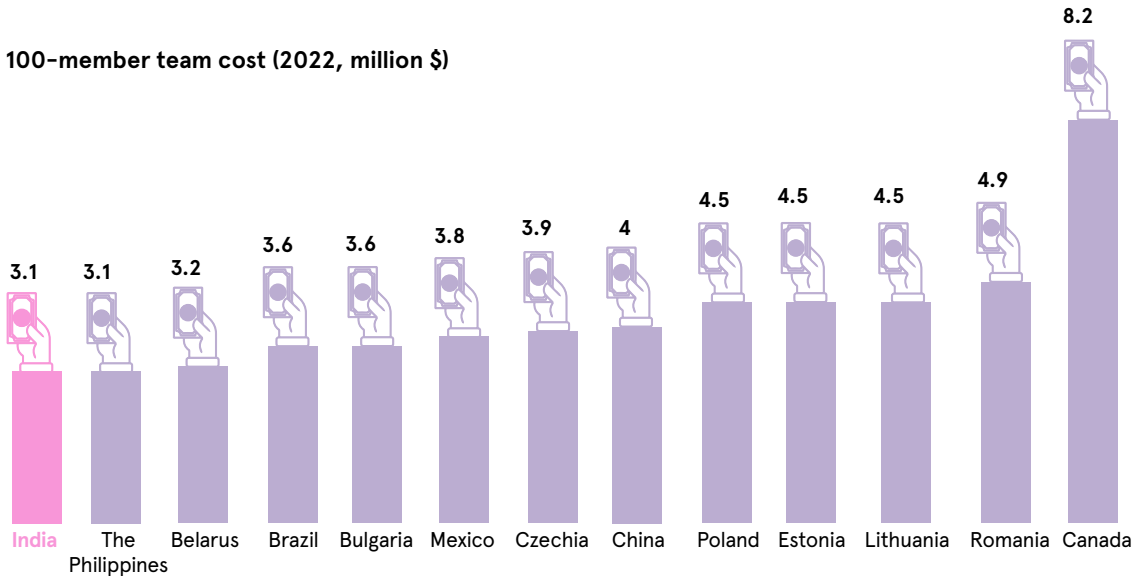
Notes: 1. See note on Page 159 for basis of city selection. 2. Data sourced on April 10, 2024
Source: getlatka.com/companies/cities

Bengaluru was...

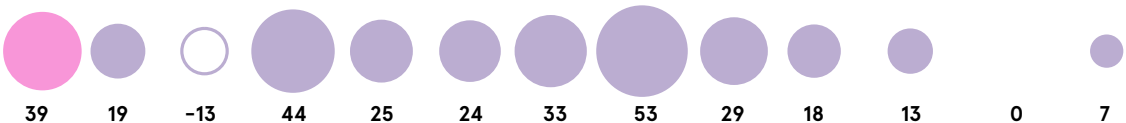


...best placed to capitalise on India's enduring cost advantage in GCCs. Despite the third-highest increase in cost, India remains the cheapest.

100-member team cost (2022, million \$)



Change between 2020 and 2022 (%)



Source: Zinnov

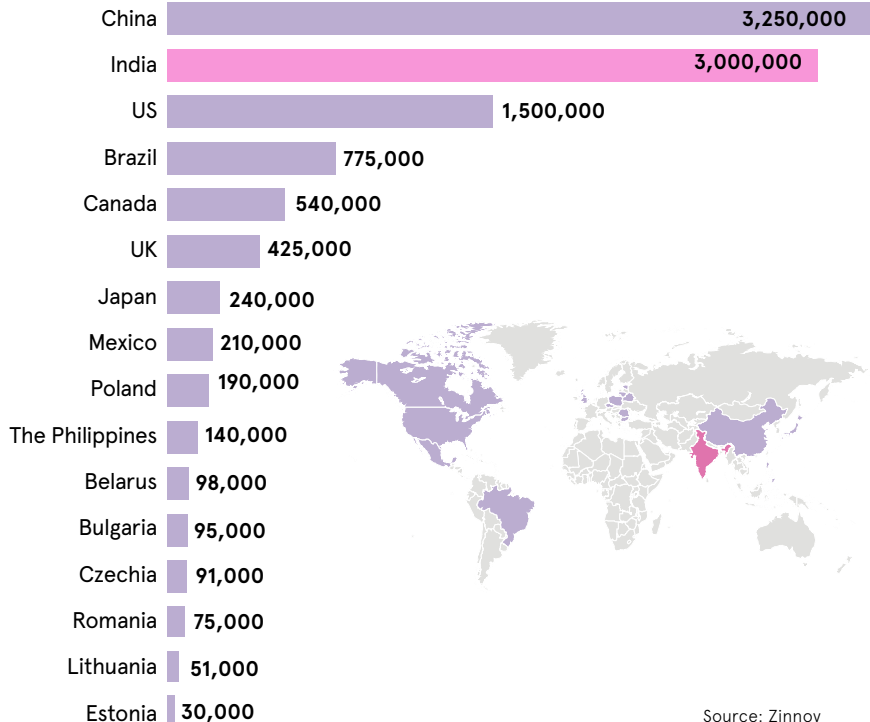
Bengaluru...



...best represents the main reason for India's success on the global capability centre (GCC) front—a large talent pool that is progressively upskilling.

India's GCC talent pool, at 3 million, was the second biggest after China, with a good mix. And as the previous page shows, India is also significantly cheaper.

Available talent pool for GCCs



Source: Zinnov

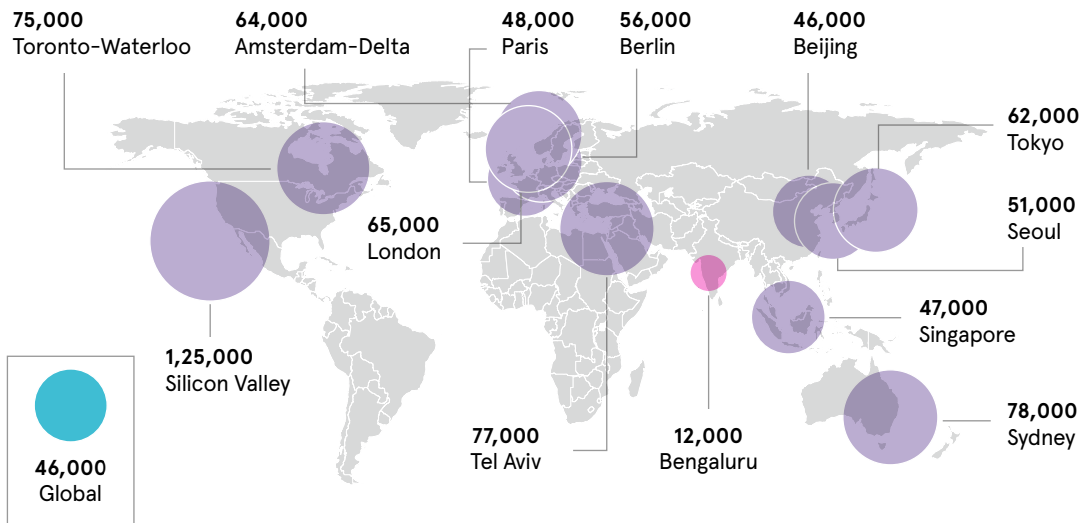
Bengaluru has...



...the cheapest IT talent on offer globally. It's significantly below startup ecosystem leaders and also a fraction of the global average.

The average annual salary of a software engineer in Bengaluru is about one-fourth that of Beijing and one-tenth of Silicon Valley. Even compared to the global average, it's only about one-fourth.

Annual salary of software engineer (2022, \$ per year)



Notes: 1. See note on Page 159 for basis of city selection.

Source: The Global Startup Ecosystem Report 2023, Startup Genome

Bengaluru is...



...the software hub of India. And India has a prominent place in the software world, one measure of which is activity on GitHub.

GitHub is a platform that lets software developers create, store, manage and share their code. In Q4 of 2023, India was ranked 2 in developer presence on the platform and the number of times they uploaded code.

Number of software developers on GitHub (million)		Total Gitpushes (million), or number of times developers uploaded code on GitHub
21.1	US	26.0
14.2	India	15.2
9.3	China	1.9
4.5	Brazil	7.1
3.6	UK	5.4
3.2	Russia	4.9
3.1	Germany	5.8
3.1	Indonesia	3.2
3.1	Japan	3.9
2.6	Canada	4.3
2.5	France	4.9

Note: 1. Data for Q4 of 2023. 2. Countries arranged in descending order of number of developers on GitHub.
Source: GitHub

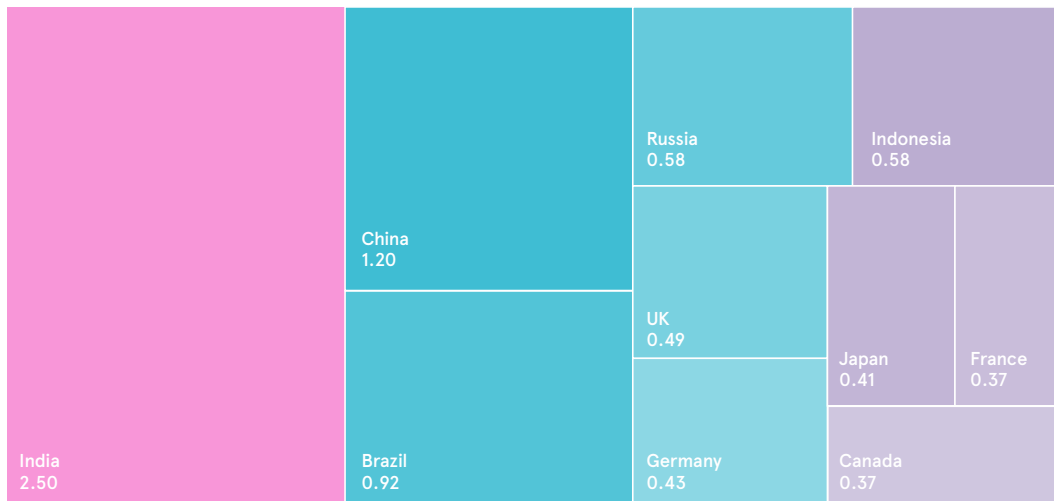
Bengaluru is...



...likely to be at the centre of the gains being made by India on GitHub, where it leads all countries in user addition.

In 2022, more software developers from India joined GitHub than from any other country. According to GitHub, "if this trajectory continues, we predict that Indian users will match the current United States GitHub developer population by 2025".

Number of new software developers who joined GitHub in 2022 (million)



Note: This report draws on anonymized user and product data taken from GitHub from October 1, 2021 through September 30, 2022.

Source: <https://octoverse.github.com/2022/global-tech-talent>

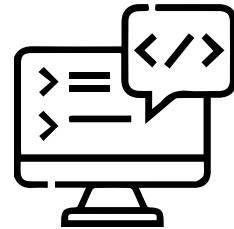
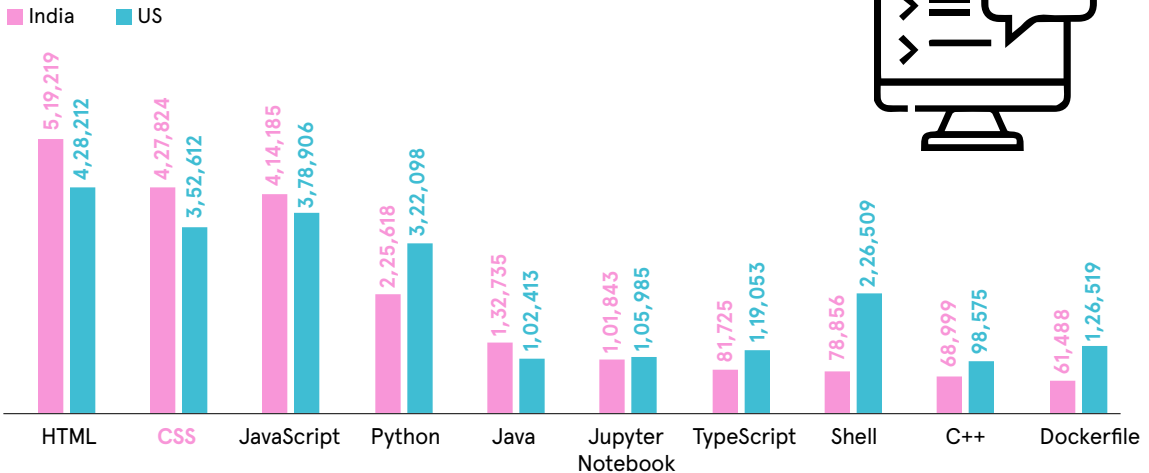
Bengaluru is...



...likely to mirror the activity of Indian developers on GitHub, which is more on basic and universal programming languages.

The US and India have the biggest presence on GitHub. The activity of about 47% of Indian developers was in basic programming languages like HTML, CSS and JavaScript, against 31% for US developers, whose presence was greater in more complex languages.

Number of developers with activity on GitHub by programming language (Q3 of 2024)



Note: 1. Data for Q4 of 2023. 2. The programming languages metric represents the most popular programming languages within an economy. It gives the total count of unique developers making at least one git push to a repository with a given programming language.

Source: GitHub

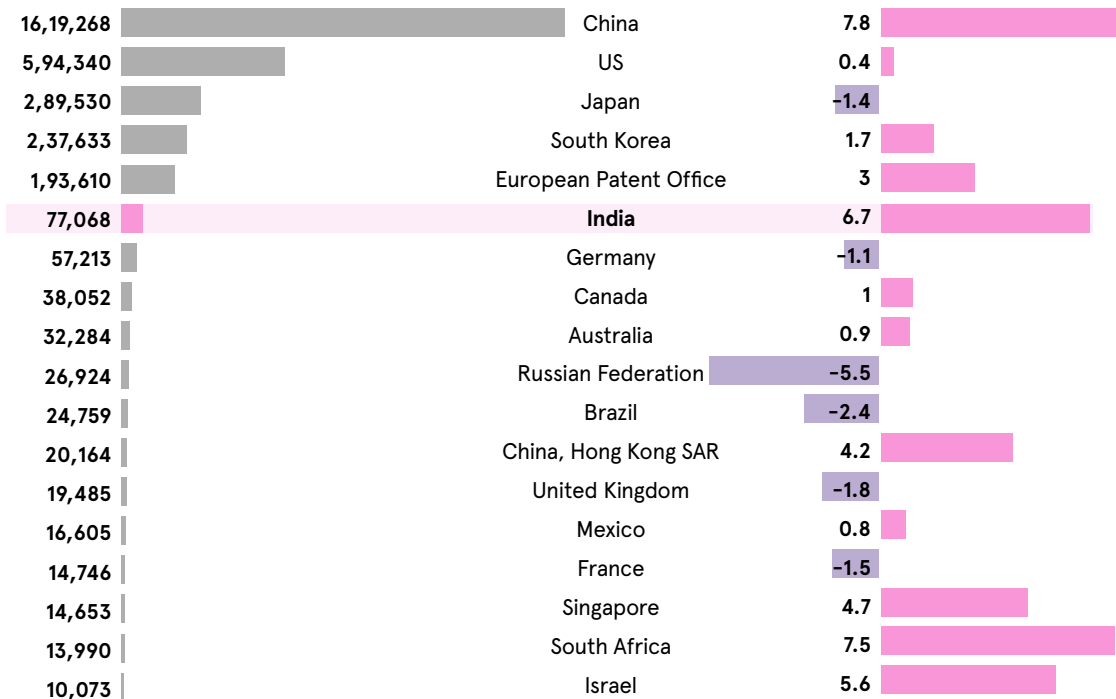
Bengaluru is...



...well-placed to ride India's position in science and innovation, where it is ranked sixth in the world on patent applications, and among the fastest growing.

Number of patent applications in 2022

9-year CAGR (%)



Source: World Intellectual Property Organization statistics database

Bengaluru is...



...scoring well on patents in a global startup ranking, but it does not score well on research.

The Startup Genome ranking of startup ecosystems has 6 themes. One of those themes is knowledge, which comprises patents and research. While India does well on patents, it lags on research, which is essentially based on publications.

Overall rank	Ecosystem	Score (out of 10) (higher, the better)	
		Patents	Research
1	Silicon Valley	9	10
2 (tied)	London	8	7
5	Tel Aviv	8	2
7	Beijing	10	4
8	Singapore	6	1
12	Seoul	9	2
13	Berlin	5	6
14	Amsterdam-Delta	3	5
15	Tokyo	9	4
17	Toronto-Waterloo	7	6
18	Paris	3	5
20 (tied)	Sydney	2	5
20 (tied)	Bengaluru	9	2

Patents: The volume, complexity, and potential patents generated in the ecosystem.

Research: Based on the H-Index, a measure of publication impact, this metric looks at the production of research at the country level.

Source: The Global Startup Ecosystem Report 2023, Startup Genome

Bengaluru is...



...ranked a lowly 56 in a global ranking of science and technology clusters, though it was the highest-placed Indian city.

Of the 13 cities that were global leaders in startup activity, all of them are above Bengaluru in output growth as a science and technology cluster.

Top science and technology cluster by economy/cross-border region ranked among top 100, 2023

Rank	Cluster name	Top applicant	Top organization
1	Tokyo–Yokohama	Mitsubishi Electric	University of Tokyo
3	Seoul	Samsung Electronics	Seoul National University
4	Beijing	BOE Technology	Tsinghua University
6	San Jose–San Francisco	Google	Stanford University
12	Paris	PSA Automobiles	Sorbonne Universite
20	London	Nicoventures Trading	University College London
26	Amsterdam–Rotterdam	TNO	Utrecht University
30	Tel Aviv–Jerusalem	Yeda Research and Development	Hebrew University of Jerusalem
33	Singapore	A*Star	National University of Singapore
52	Toronto	DH Technologies Development	University of Toronto
56	Bengaluru	Samsung Electronics	IISC – Bangalore

Note: See Page 159 for basis of selection of cities.

Source: Global Innovation Index 2023, World Intellectual Property Organization

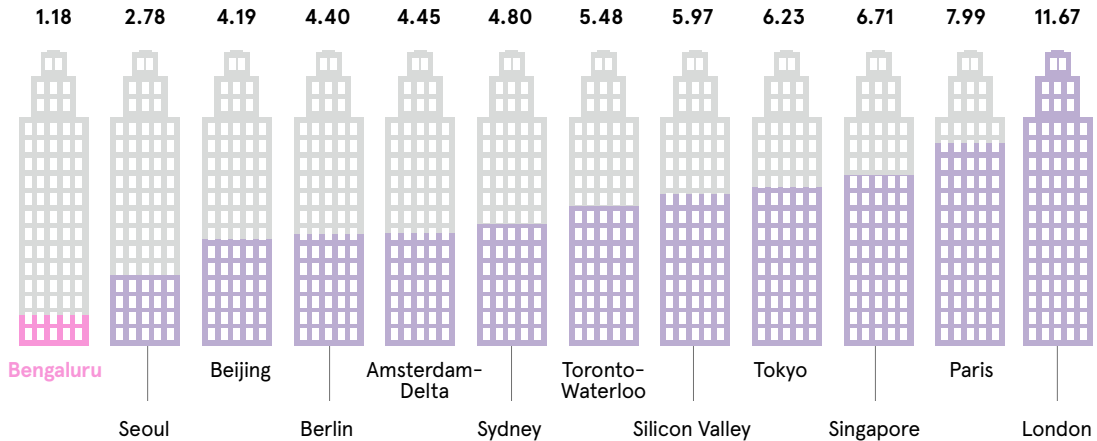
Bengaluru is...



...the cheapest in renting top-tier office space by a long way. Its average rental cost is about one-third that of Beijing.

Among leading global startup cities, Asian cities, with the exception of Singapore, are among the cheapest for renting office space. And Bengaluru is the cheapest among them—its rental cost is about 42% of Seoul, 28% of Beijing and just 17% of Singapore.

Market rent (\$ per sq ft per month)



Notes: 1. Rent shown here is market rent for prime/Grade A space based on local conventions. 2. See Page 159 for basis of selection of cities. 3. Data for Tel Aviv not available. 4. Exchange rate as of March 28, 2024. 5. For Tokyo and Seoul, local measurement units have been converted to sq ft.

Source: Jones Lang LaSalle

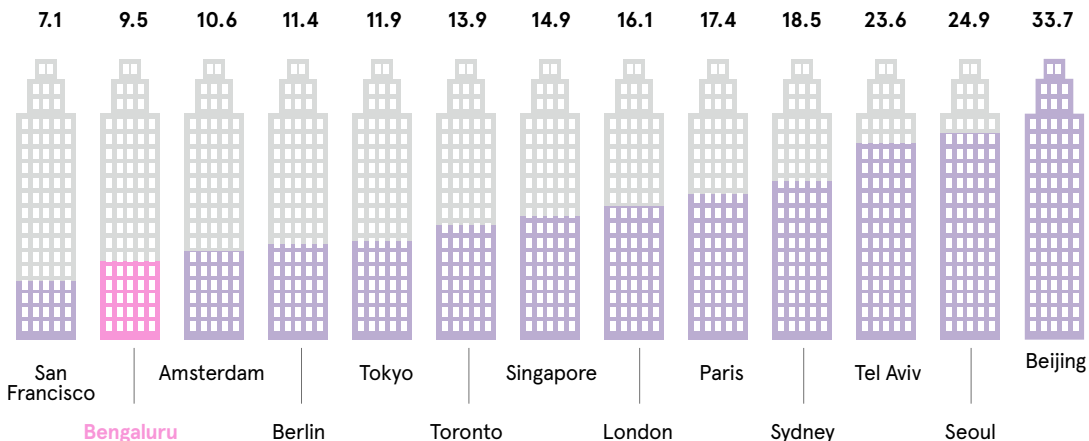
Bengaluru is...



... the most affordable among the leading global startup ecosystems to buy a house.

In Bengaluru, given its average incomes and house prices, it will take around 9.5 years to own a house. Only San Francisco, which however has the advantage of significantly higher incomes, does better. In Beijing, which is at the other end, this figure is 33.7 years.

House price-to-income ratio (years) (lower value indicates greater affordability)



Note: Price-to-income ratio is a measure to calculate apartment purchase affordability—given current income, how many years will it take to purchase an apartment. A lower ratio indicates greater affordability.

Ratio of median prices of a 90 sq m apartment / Median disposable income of a family

Net disposable family income: 1.5 times average net salary (50% is the assumed percentage of women in the workforce).

Apartment price is average in city centre and outside.

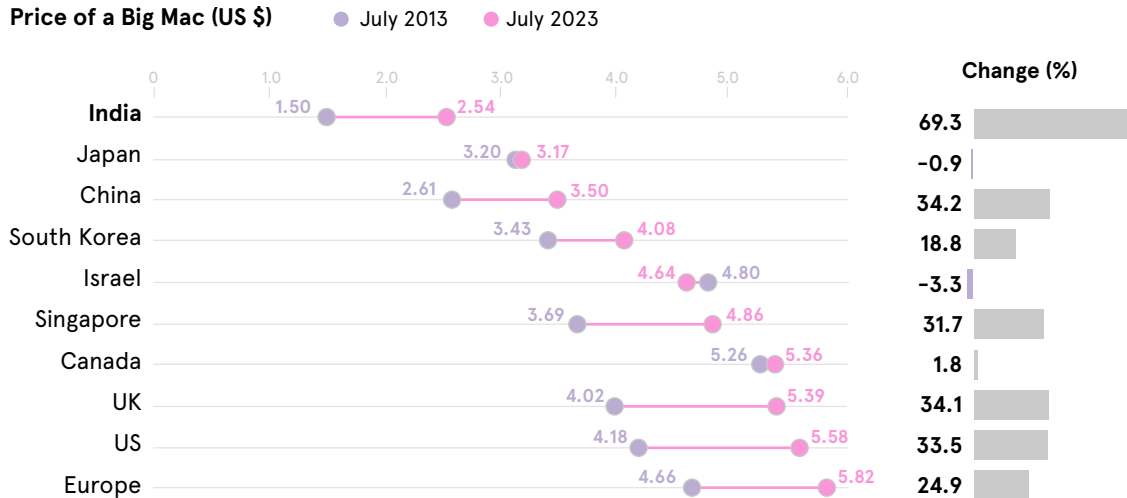
Source: Numbeo

Bengaluru was...



...the cheapest among the leading global startup ecosystems in terms of cost of living and a currency's purchasing power.

The Big Mac Index of The Economist, which tracks the price of a Big Mac hamburger across cities and over time, shows that Bengaluru has seen the highest increase in the past 10 years. Yet, it remains the cheapest.



Notes: 1. The Big Mac index is created by The Economist magazine in 1986 to measure relative consumer purchasing power between nations—termed purchasing power parity (PPP)—using the price of a McDonald's Big Mac as the benchmark. 2. Data at a country level.


Source: The Economist's Github page

Bengaluru has...



...the worst traffic in our set of global ecosystems, after Toronto and London, which though has an extensive metro network.

Bengaluru is ranked sixth among global cities in having the worst traffic. On average, it takes about 28 minutes to travel a distance of 10 km in Bengaluru. The additional time added due to traffic is about 63%.



City	Rank	Average travel time/10 km (mins)	Congestion level (%)	Average speed in rush hour (km/h)
London	1	37:20	45	14
Toronto	3	29:00	42	18
Bengaluru	6	28:19	63	18
Pune	7	27:50	57	19
Paris	16	26:39	46	18
Tokyo	27	23:40	35	21
Berlin	42	22:00	32	24
New Delhi	44	21:40	36	23
Sydney	47	21:30	36	23
Mumbai	54	21:20	43	23
Silicon Valley (San Francisco)	71	20:30	38	25
Amsterdam	151	17:10	37	31
Singapore	170	16:50	38	29
Bengaluru rank in set (out of 13)	11	11	13	10

Congestion level: Average additional time (in %) lost to traffic compared to driving in free-flow conditions. Data for Beijing, Seoul and Tel Aviv not available. Source: TomTom

Health and Crime Indices

Methodology

1. Each of the 7 themes represents a fundamental dimension of the sector, and was assigned an equal weight. Thus, for 7 themes, each theme had a weight of 1.
2. Each theme had 1-7 metrics. Under a theme, each metric carried equal weights. Thus, if a theme had 4 metrics, each metric was assigned a weight of 1/4. For 7 metrics, 1/7. This is to ensure that if one theme has more metrics than others, it doesn't have more influence on the overall score by virtue of having more metrics. For each metric, values were rescaled using minimum-maximum scaling, and assigned their respective weights.
3. Under a theme, all weighted rescaled values were added to derive the theme score.
4. All theme scores were added to derive the overall score.

Health index (Page 111): Metrics

Childbirth

1. Mothers who had at least 4 antenatal care visits (%)
2. Mothers who consumed iron folic acid for 180 days or more when they were pregnant (%)
3. Average out-of-pocket expenditure per delivery in a public health facility (Rs)
4. Institutional births in public facility (%)

Children

5. Children age 12-23 months fully vaccinated based on information from vaccination card only (%)
6. Children age 12-23 months who received most of their vaccinations in a public health facility (%)
7. Children under 5 years who are stunted (height-for-age) (%)

8. Children under 5 years who are wasted (weight-for-height) (%)
9. Children under 5 years who are underweight (weight-for-age) (%)
10. Children under 5 years who are overweight (weight-for-height) (%)
11. Children age 6-59 months who are anaemic (<11.0 g/dl) (%)

Family planning

12. Current use of family planning methods (currently married women age 15-49 years): Any modern method (%)
13. Health worker ever talked to female non-users about family planning (%)
14. Current users ever told about side effects of current method (%)

Home

15. Households using clean fuel for cooking (%)
16. Population living in households with an improved drinking-water source (%)
17. Population living in households that use an improved sanitation facility (%)

Men

18. Men age 15 years and above who use any kind of tobacco (%)
19. Blood sugar level-high or very high (>140 mg/dl) or taking medicine to control blood sugar level (%)
20. Elevated blood pressure (Systolic =140 mm of Hg and/or Diastolic =90 mm of Hg) or taking medicine to control blood pressure (%)

Safety net

- Households with any usual member covered under a health insurance/financing scheme (%)

Women

- Women age 15-24 years who use hygienic methods of protection during their menstrual period (%)
- Sex ratio at birth for children born in the last five years (females per 1,000 males)
- Women whose Body Mass Index (BMI) is below normal (BMI <18.5 kg/m²) (%)
- All women age 15-49 years who are anaemic (%)
- Blood sugar level - high or very high (>140 mg/dl) or taking medicine to control blood sugar level (%)
- Elevated blood pressure (Systolic =140 mm of Hg and/or Diastolic =90 mm of Hg) or taking medicine to control blood pressure (%)

Crime index (Page 112): Metrics**Overall crime**

- Rate of cognizable crimes (IPC + SLL)
- Court disposal of IPC crimes: pendency (%)
- Court disposal of SLL crimes: pendency (%)
- Police disposal of IPC crimes: pendency (%)
- Police disposal of SLL crimes: pendency (%)

Women

- Rate of total crime against women (Rate per lakh population)
- Assault on women with intent to outrage her modesty (Rate per lakh population)
- Cruelty by husband or his relatives (Rate per lakh population)
- Kidnapping and abduction of women (Rate per lakh population)
- Rape (Rate per lakh population)
- Police, disposal of crime against women: pendency (%)
- Courts, disposal of crime against women: pendency (%)

Children

- Crimes against children (Number)
- Police disposal of crime against children: pendency (%)
- Court disposal of crime against children: pendency (%)

Heinous crimes

- Causing death by negligence (Rate per lakh population)
- Kidnapping and abduction (Rate per lakh population)
- Murder (Rate per lakh population)

Theft

- Total theft (Rate per lakh population)
- Auto/motor vehicle theft (Rate per lakh population)
- Burglary (Rate per lakh population)

Road accidents

- Deaths due to negligence relating to road accidents (Rate per lakh population)

Cyber crimes

- Rate of total cyber crimes (Rate per lakh population)
- Court disposal of cyber crimes: pendency (%)
- Police disposal of cyber crimes: pendency (%)

Economic crimes

- Rate of total economic offences (Rate per lakh population)
- Court disposal of economic offences: pendency (%)
- Police disposal of economic offences: pendency (%)

Acknowledgements

Our thanks to the following organisations and individuals who have generously shared information from their data repositories for this book.

Organizations



Individuals

Professor P G Diwakar,
ISRO Chair Professor, National Institute of Advanced Studies (NIAS)

About How India Lives

How India Lives (HIL) is a 10-year-old data analytics and business intelligence company that specializes in providing actionable insights and narrating stories using data. We identify, extract, analyze and visualize publicly-available data, even combine this with internal data, to help organizations answer questions specific to them. For example, where to set up stores? Which are upcoming growth markets? What is a geography's market potential?

Our Services

Data analytics: Uncover valuable insights from diverse data sources, including satellite data

Market research: Understand markets and trends.

Consumer behaviour: Understand target audience at a granular level.

Customized solutions: Tailored to meet your specific business needs—forecasting model, data catalogues and databases, automation and visualization.

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Corporates: Aditya Birla Group, Tata Sons, ACT Fibernet, Marico, CII

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Research: IDFC Institute, CSIP Ashoka University, CBGA

Media: Mint, Hindustan Times, IIT Shaastra

Government: Government of Telangana, NALSA

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UnboxingBLR Foundation

UnboxingBLR Foundation is a collaborative not-for-profit focused on Bengaluru, India's tech hub. We are on a mission to celebrate and document the city's journey, and help people experience and engage with the city better. We are an enabler and catalyst working in the areas of heritage, music, art, literature, dance, cinema, theatre, sports, and many more. By breaking silos and rallying multiple stakeholders—government, corporates, philanthropists, and citizens—our vision is to make Bengaluru more livable and vibrant.

Book

Unboxing Bengaluru is an authoritative contemporary biography of Bengaluru that takes a 360-degree ground-up view of the city. The deeply-researched book (600+ interviews) is a multi-layered exploration of how the city has transformed from a pensioner's paradise

to India's tech capital, and Bengaluru's role in shaping the country's future.

City Festival

We are an enabler working with all stakeholders to celebrate and augment the city's cultural landscape. From organising 'Hubba (Festival) in Your park' to channelling its youthful energy, celebrating its science heritage to stoking dialogues and literary pursuits—we are working to make Bengaluru's public spaces vibrant. The highlight is a two-week all-encompassing annual cultural festival in December where the city comes together to experience Bengaluru in all its fullness and richness.

Data Report

How is Bengaluru changing? With data collected from multiple sources—government, regulatory, digital & satellite—our annual data report offers



a fact-based, rounded understanding of the city’s growth, its challenges and how it stacks up vis-a-vis other top Indian cities and global tech hubs. Presented in an easily accessible manner, the report’s intent is to build a more informed data-led understanding of the city among people, experts and policy makers.

Podcast

From Code to Culture (FCTC), UnboxingBLR’s podcast features engaging conversations with diverse voices from Bengaluru offering a peek into the life, vibe and ethos of Bengaluru.

WCCF

In 2023, we helped Bengaluru become the first Indian city to join the World Cities Culture Forum (WCCF)—a global platform of 40 major

global cities who have come together to exchange ideas and share best practices as they build culturally vibrant cities.

Docu Series

On the drawing board is a multi-part docu-series—to be released on an OTT platform—to explore and capture multiple layers that have shaped Bengaluru.

Museum

India’s first Museum of Innovation, Startups & Tech. Explore the groundbreaking ideas, cutting-edge technologies, and inspiring success stories that have made Bengaluru and India a hub of innovation, technology and entrepreneurship.



About the Report

Where does Bengaluru sit among Indian cities as an economic hub? This data book from Unboxing BLR assesses how Bengaluru stacks up against 6 other leading Indian cities on 5 key data prisms—economic, consumer, demographic, liveability and tech.

Plus: Where Bengaluru compares against 12 other global startup hubs.

unboxingBLR

UnboxingBLR Foundation is a not-for-profit platform that helps people explore and experience Bengaluru's dynamic transformation in newer and deeper ways.



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Data and design

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