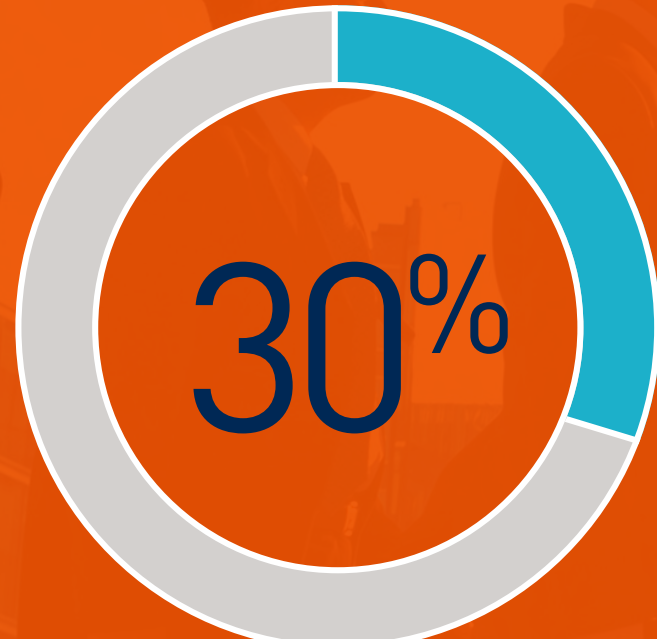


## Consequences and impacts of the global proliferation of megacities

For the first time in history, the majority of people on earth live in cities rather than rural areas.

### Remarkable demographic and geographic transformation from 1950



30 percent of the earth's then 2.5B inhabitants lived in urban environments.

The urbanization process, especially in developing countries, is pushing people into cities at an accelerating rate. This growth brings a wealth of opportunities and also many challenges for corporations and other institutions.

### Global Real Estate Implications

A megacity commonly is defined as a metropolitan area with a total population of more than 10 million people — whether in a single city or through the convergence of two or more adjacent metropolitan areas. As of 2016, 35 metropolitan areas worldwide are classified as megacities. At least five more will join the list by 2025.

Megacity =

10M+

Population in Metropolitan Area

### The Fastest Growing Megacities and Expected Rate of Growth from 2000-2010

Megacity	Est. Population	Expected Percentage Rate of Growth
1 - Karachi, Pakistan	20.88M	80.5%
2 - Shenzhen, China	12.51M	56.1%
3 - Lagos, Nigeria	12.09M	48.2%
4 - Beijing, China	18.24M	47.6%
5 - Bangkok, Thailand	14.54M	45.2%
5 - Dhaka, Bangladesh	14.34M	45.2%
7 - Guangzhou-Foshan, China	17.69M	43.0%
8 - Shanghai, China	21.77M	40.1%
9 - Delhi, India	22.83M	39.2%
10 - Istanbul, Turkey	12.92M	25.3%



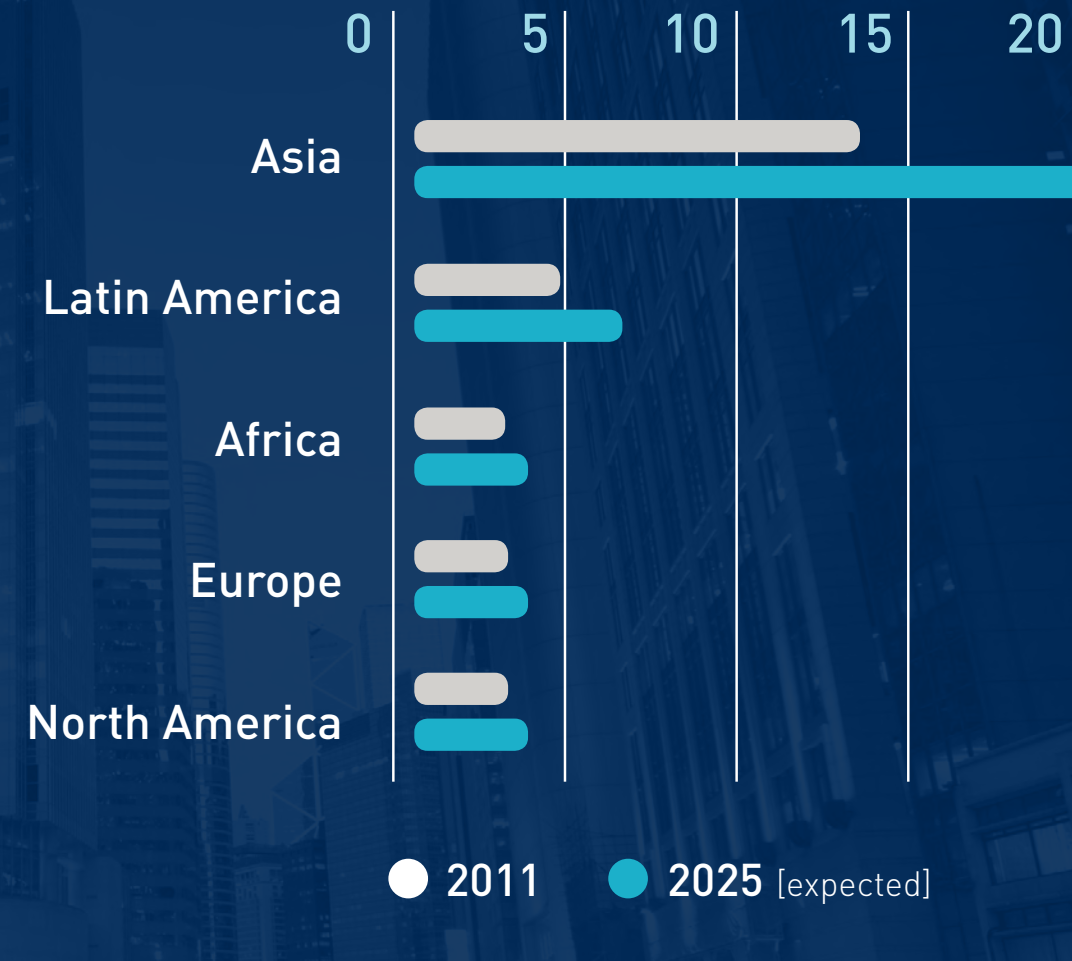
Source: Forbes (online): The World's Fastest Growing Megacities. (based on population data from Demographia World Urban Areas)

Tokyo is the largest of the megacities with a population of 38 million. To provide some perspective, if Tokyo were considered a country, it would be the 31st largest in the world by 2025.<sup>1</sup>

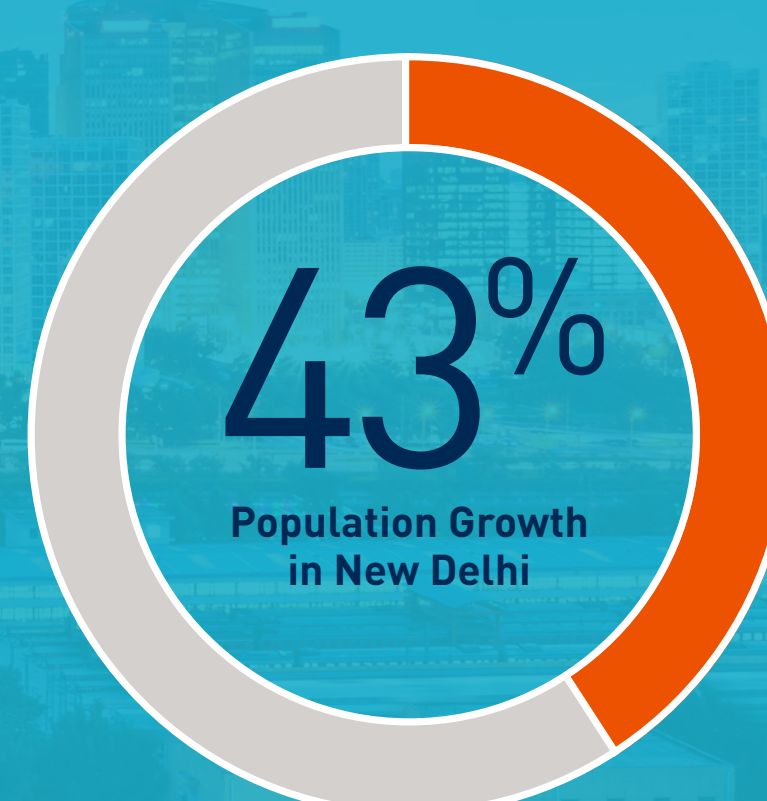
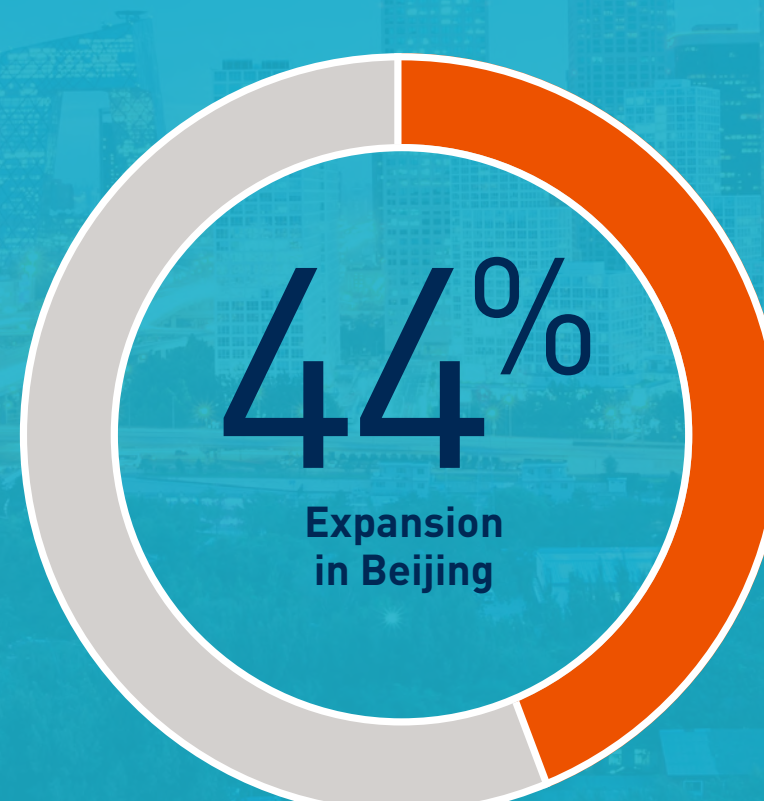
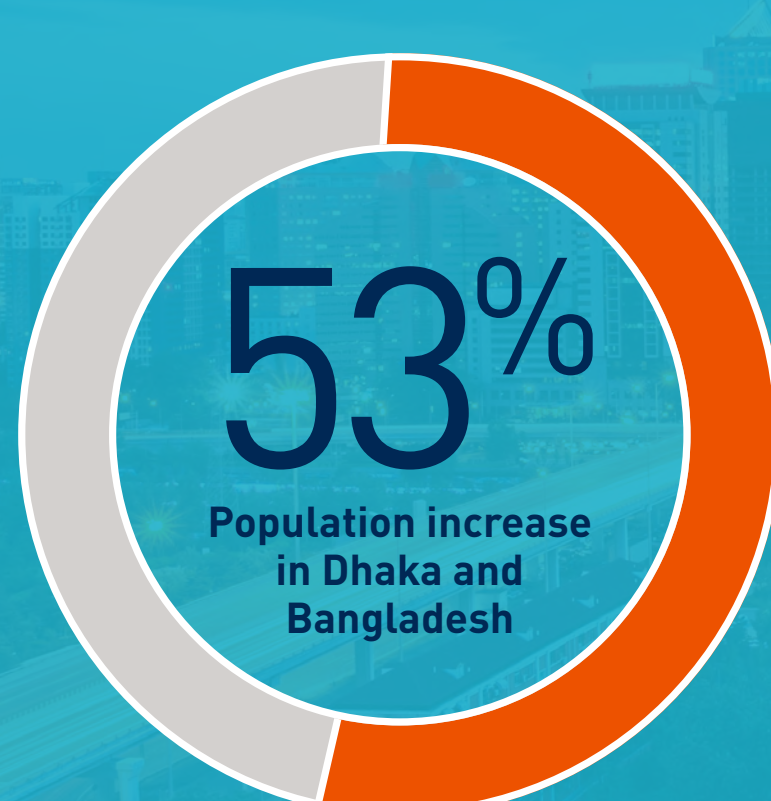
### Urban growth data reveals a very clear trend.

The vast majority of the world's largest and fastest growing megacities are in developing countries.<sup>2</sup> While entire new cities are forming in countries like China and India, the rapid expansion of existing major cities Brazil, Mexico, Nigeria, South Africa and Turkey<sup>3</sup> is more typical.

#### Change in Number of Megacities Per Region



China is expected to add dozens of new megacities over the next 30 years.<sup>4</sup> Some of the fastest growth will occur in Dhaka, Bangladesh, where the city will see a population increase of 53 percent. Beijing is set to expand by 44 percent, while New Delhi's population will grow by 43 percent.<sup>5</sup>



### Public Policy Implications

As these urbanization trends accelerate, issues of sustainability and infrastructure to support businesses and city dwellers become critical.<sup>6</sup> Strong institutions — from government to businesses to cultural groups — are critically needed to strategically manage growth and pre-empt or address problems and externalities.

Megacities are in competition with each other and the winners will be the ones with well-developed infrastructure, or at least the capital and political will to deliver it.



Accompanying this massive growth is the demand and competition for labor skill sets that did not exist even three years ago. This is a challenge public and private institutions will need to tackle together.

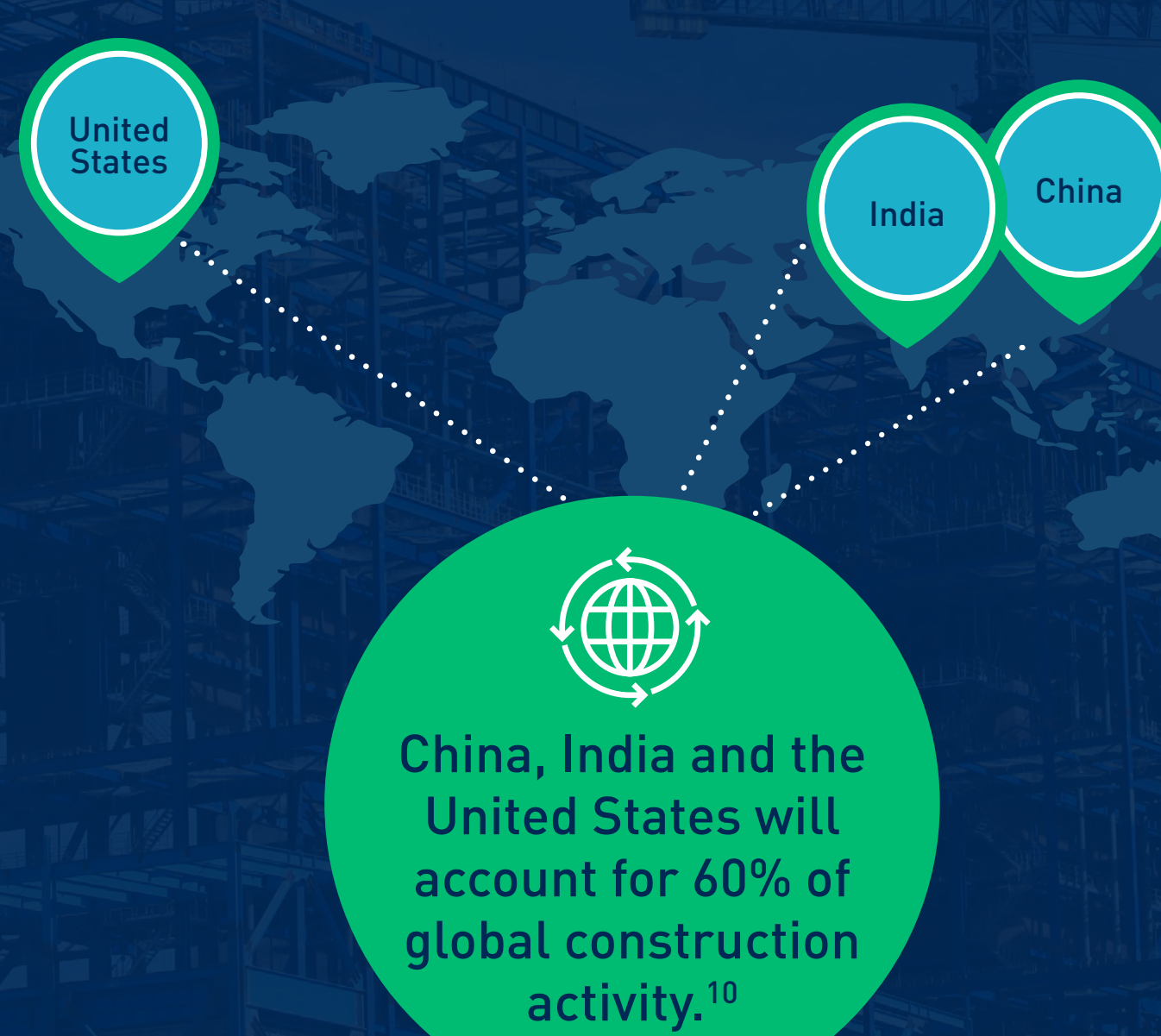
### Global Real Estate Implications

Rapid urbanization within emerging markets will propel real estate investment during the foreseeable future.<sup>7</sup> "The real estate industry is currently undergoing fundamental changes today that we expect will significantly reshape the landscape in 2020," points out Byron Carlock, U.S. real estate practice leader at PwC.<sup>8</sup> This investment activity will trigger new real estate opportunities for urban density housing, transit-oriented development and urban high street retail.<sup>9</sup>



### Emerging markets by 2025

Transforming already crowded urban space to high-density housing will greatly increase competition and risks in the real estate market given that urbanization will be accompanied by an increasing demand for senior or inter-generational housing for retiring baby boomers and micro-units for millennials.<sup>11</sup>



China, India and the United States will account for 60% of global construction activity.<sup>10</sup>

The real estate investment community has options for deploying urbanization strategies ranging from high-risk, opportunistic development to lower-risk, prime investment.



But no matter which approach they choose, investors will need to rely on a clear strategic view of whether and how a megacity will be sustainable.

### Corporate Mobility Program Implications

Globally active companies that are hiring or transferring employees should stay informed on individual and global megacity trends. Some cities are experiencing the type of growth that can significantly impact real estate and infrastructure situations. Relocation budgets, support services, housing options and other elements of a relocation program will hinge on the rate of local urban growth, how it is being managed and the condition of the local residential and commercial real estate markets.



### KEY TAKEAWAYS

1

There's a very clear, direct relationship between global relocation activity and urban growth. It's never too early to begin exploring relocation options in these fast-growing megacities.

2

Not all megacities are managing growth well, so global corporations will need to tailor their assignee support for the local conditions.

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