India's urban awakening: Building inclusive cities, sustaining economic growth

WORLD CITIES SUMMIT

CII Confederation of Indian Industry

July 2012

McKinsey&Company

Worldwide, urban populations are growing 20x faster; 57% of world's population will be in urban areas by 2025

Forecast

Share of urbanized population over total population

Thousand people

2010-2025 CAGR

	1950	1960	1970	1980	1990	2000	2010	2020	2025
Total	2,535	3,032	3,699	4,451	5,295	6,124	6,907	7,667	8,010
Rural	1,798	2,036	2,367	2,711	3,020	3,270	3,412	3,457	3,426
Urban	737	996	1,332	1,741	2,275	2,854	3,495	4,210	4,584

Rural: 0.1%

Urban: 2.0%

Percentage of population urbanized

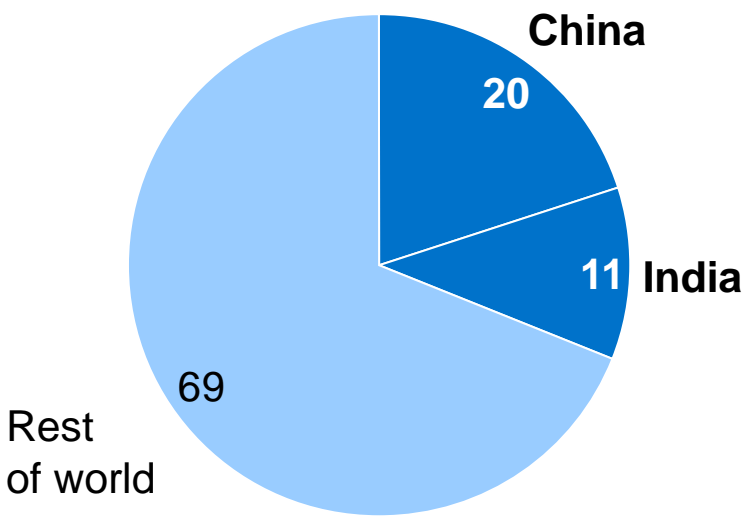| 1950	1960	1970	1980	1990	2000	2010	2020	2025
29	33	36	39	43	47	51	55	57

1

Within Asia, China and India will be at the forefront of urbanization…

Share of global urban population, 2025
Percent

100% = 4.7 billion people
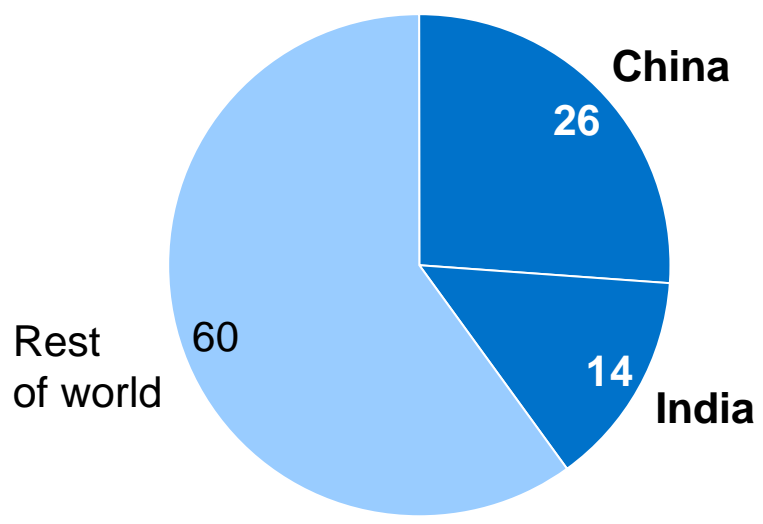

China **20**

11 India

69

Rest of world

Share of growth of global urban population from 2005 to 2025
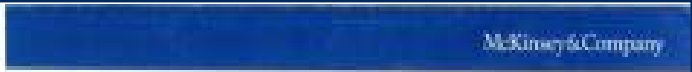Percent

100% = 1.6 billion people

China **26**

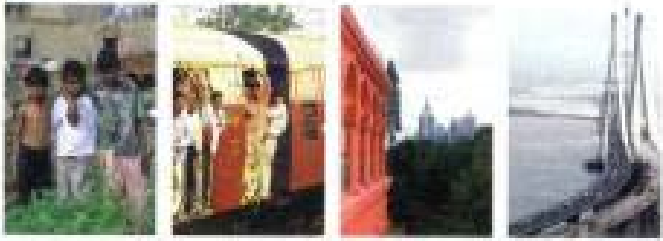**14** India

Rest of world 60

1 India and China urban population for 2025 are based on MGI estimates; rest of world based on UN estimates.

In 2010, we completed a 21−month study on India's urban development

Meeting with the Prime Minister and members of Cabinet, September 2010 to present the study findings

India's Urban Awakening: Building inclusive cities, sustaining economic growth
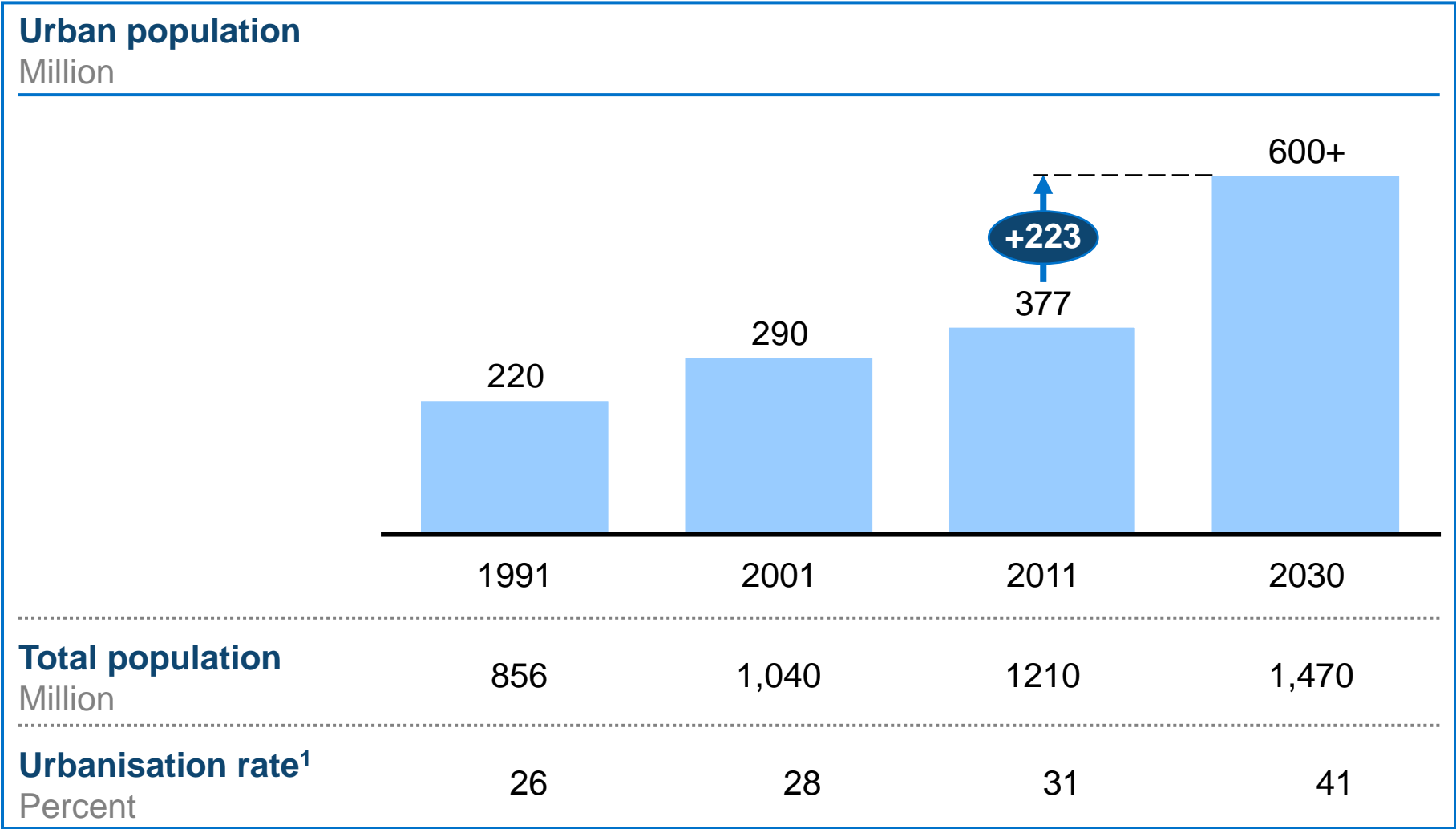
Duration: August 2008 to April 2010

Executive summary

1 **Cities are critical to India's future economic growth**

2 Significant challenges exist in the current approach to India's urbanisation

3 At the same time, massive opportunities are visible

Cities are likely to house 40 percent of India's population by 2030

Urban population
Million

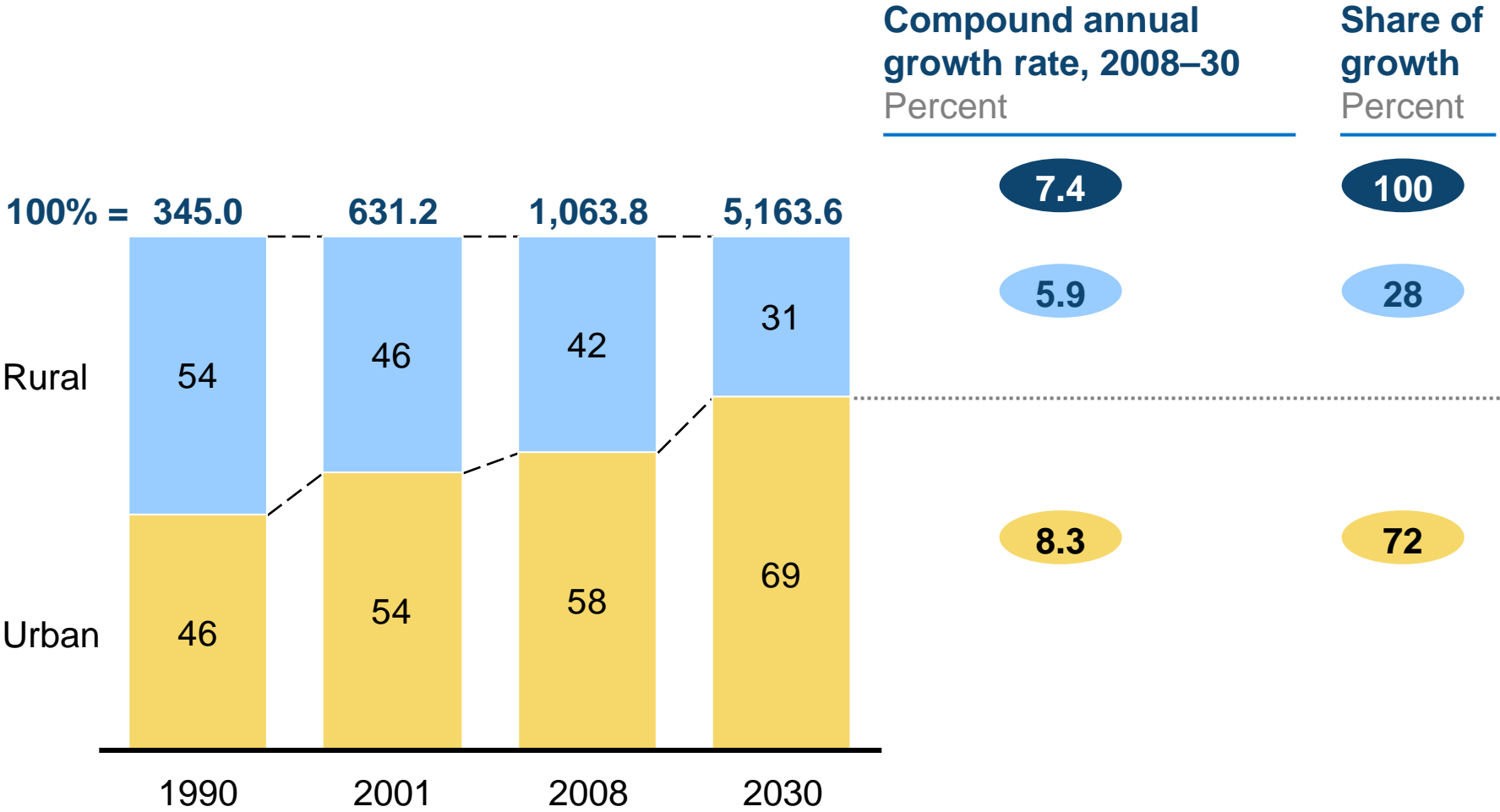|	1991	2001	2011	2030
Urban population	220	290	377 (+223)	600+
Total population Million	856	1,040	1210	1,470
Urbanisation rate[1] Percent	26	28	31	41

1 Defined as the ratio of urban to total population based on the census definition of urban areas; population >5,000; density >400 persons per square kilometre; 75 percent of male workers in non-agricultural sectors; and statutory urban areas.

Cities will account for nearly 70 percent of India's GDP by 2030

Share of India's GDP
Percent; USD billion, real 2008

	Compound annual growth rate, 2008–30 Percent	**Share of growth** Percent
	7.4	100

100% =	345.0	631.2	1,063.8	5,163.6

Rural: 54, 46, 42, 31 — CAGR 5.9, Share of growth 28

Urban: 46, 54, 58, 69 — CAGR 8.3, Share of growth 72

| 1990 | 2001 | 2008 | 2030 |

10 states will be more than 50% urbanised by 2030

	Urbanisation rate Percent, total population	Urban population Million
	2011 / 2030	
Tamil Nadu	48 / 62	34.9 / 52.7
Kerala	48 / 69	15.9 / 25.3
Maharashtra	45 / 60	50.8 / 79.9
Gujarat	43 / 63	25.7 / 45.4
Karnataka	39 / 55	23.6 / 39.2
Punjab	37 / 54	10.4 / 19.0
Haryana	35 / 52	8.8 / 16.5
Andhra Pradesh	33 / 53	28.4 / 51.2
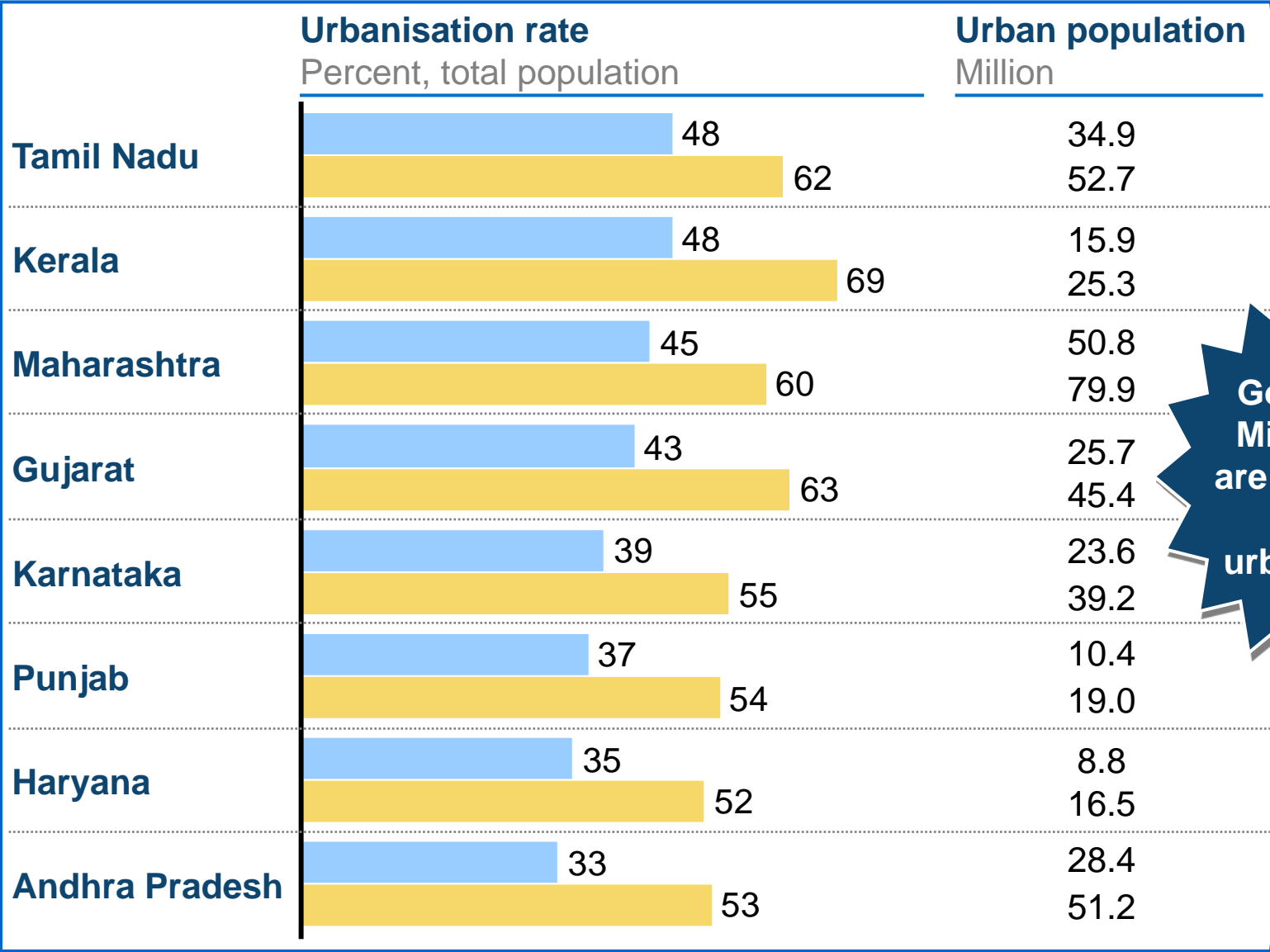
Goa and Mizoram are already 50% urbanised

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The current performance of India's cities is poor across key indicators of quality of life
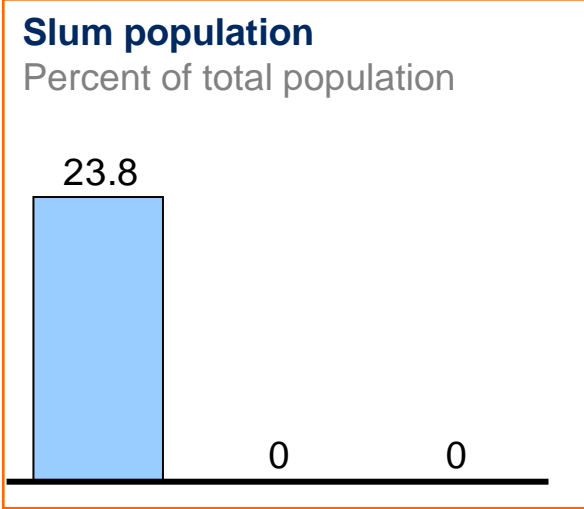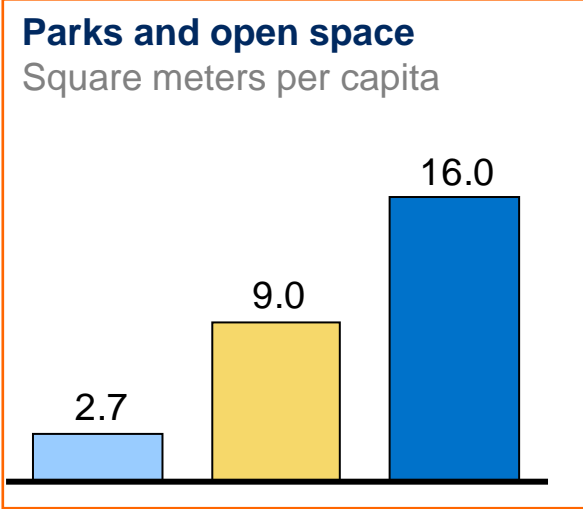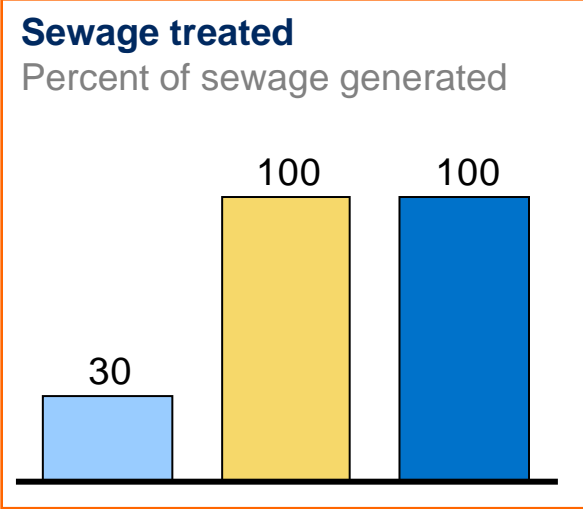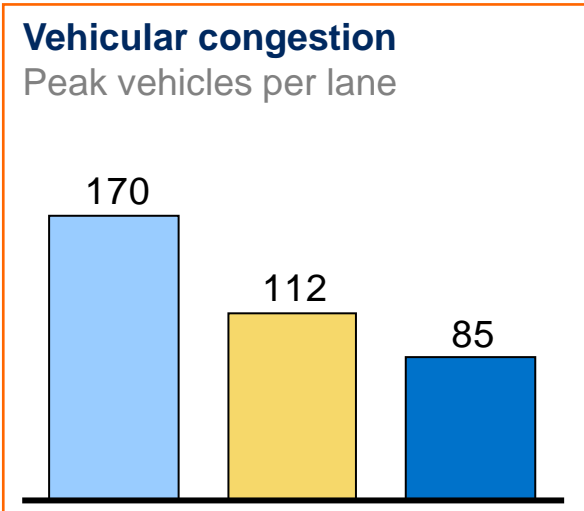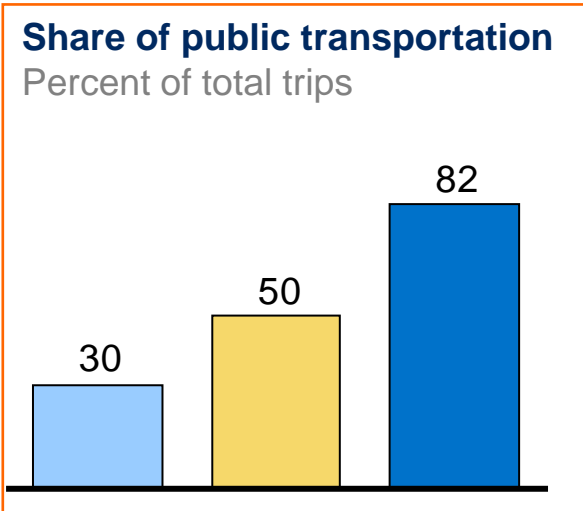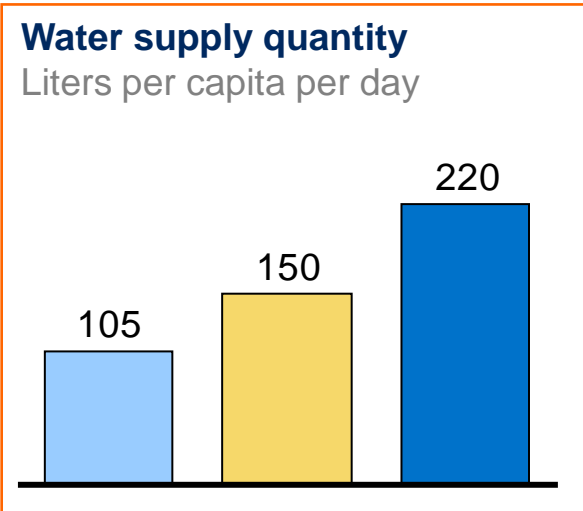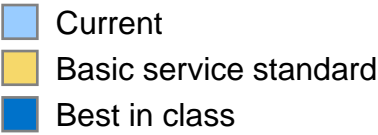
Legend:
- Current (light blue)
- Basic service standard (yellow)
- Best in class (dark blue)

Water supply quantity
Liters per capita per day
- 105
- 150
- 220

Share of public transportation
Percent of total trips
- 30
- 50
- 82

Vehicular congestion
Peak vehicles per lane
- 170
- 112
- 85

Sewage treated
Percent of sewage generated
- 30
- 100
- 100

Parks and open space
Square meters per capita
- 2.7
- 9.0
- 16.0

Slum population
Percent of total population
- 23.8
- 0
- 0

Current trajectory will result in urban decay and gridlock

Water supply quantity
Liters per capita per day

Current

			Future
105	150	220	65

Vehicular congestion
Peak vehicles per lane kilometer

			610
170	112	85	

Slum population
Million households

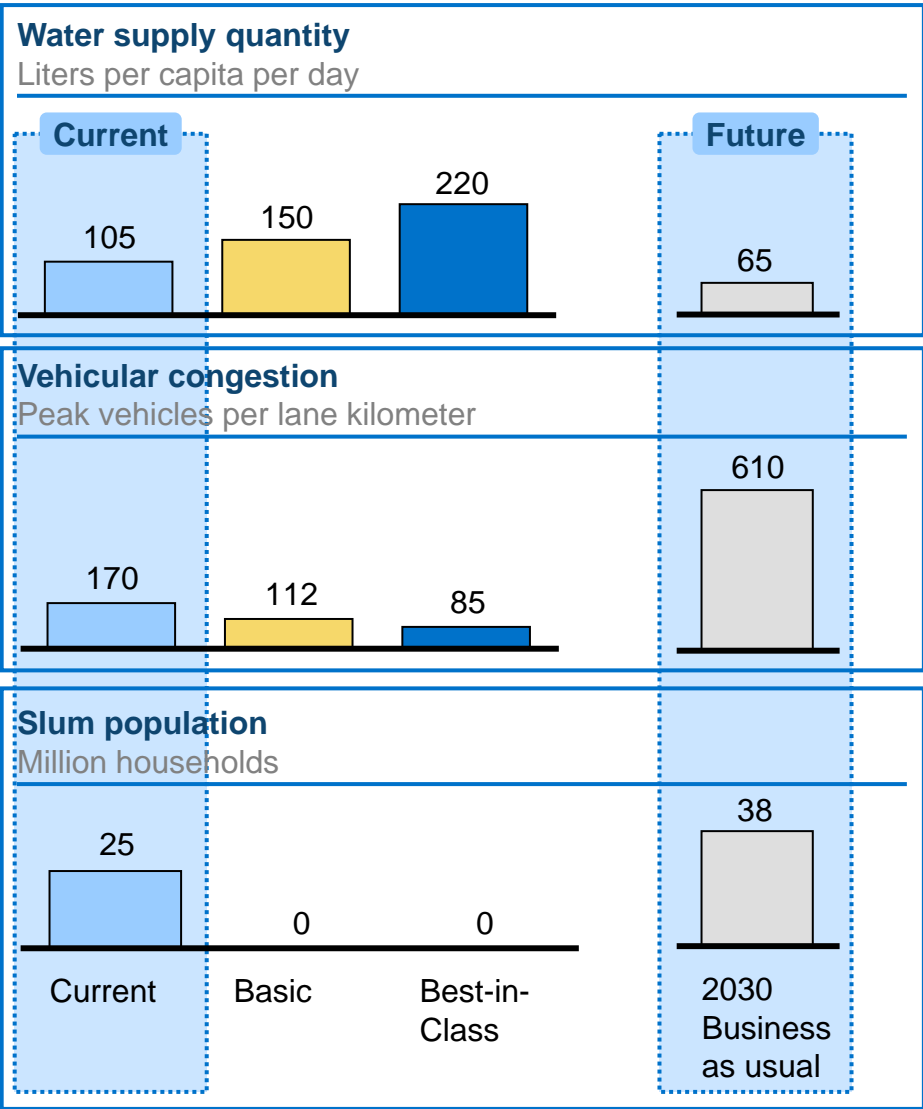|			38
25	0	0	
Current	Basic	Best-in-Class	2030 Business as usual

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Urbanisation will dramatically increase the size of the Indian middle class

■ Middle class

All India households by income bracket, 2000-30
%, million households, 2000 prices

Income segment
` thousand

100% =	189	222	273	322	
	4 / 1 / 0	2 / 1	3	7	**Globals** >1,000
	31	12	6	17	**Strivers** 500–1,000
		34	25	29	**Seekers** 200–500
	64	50	40	32	**Aspirers** 90–200
			26	15	**Deprived** <90
	2000	2008	2020	2030	
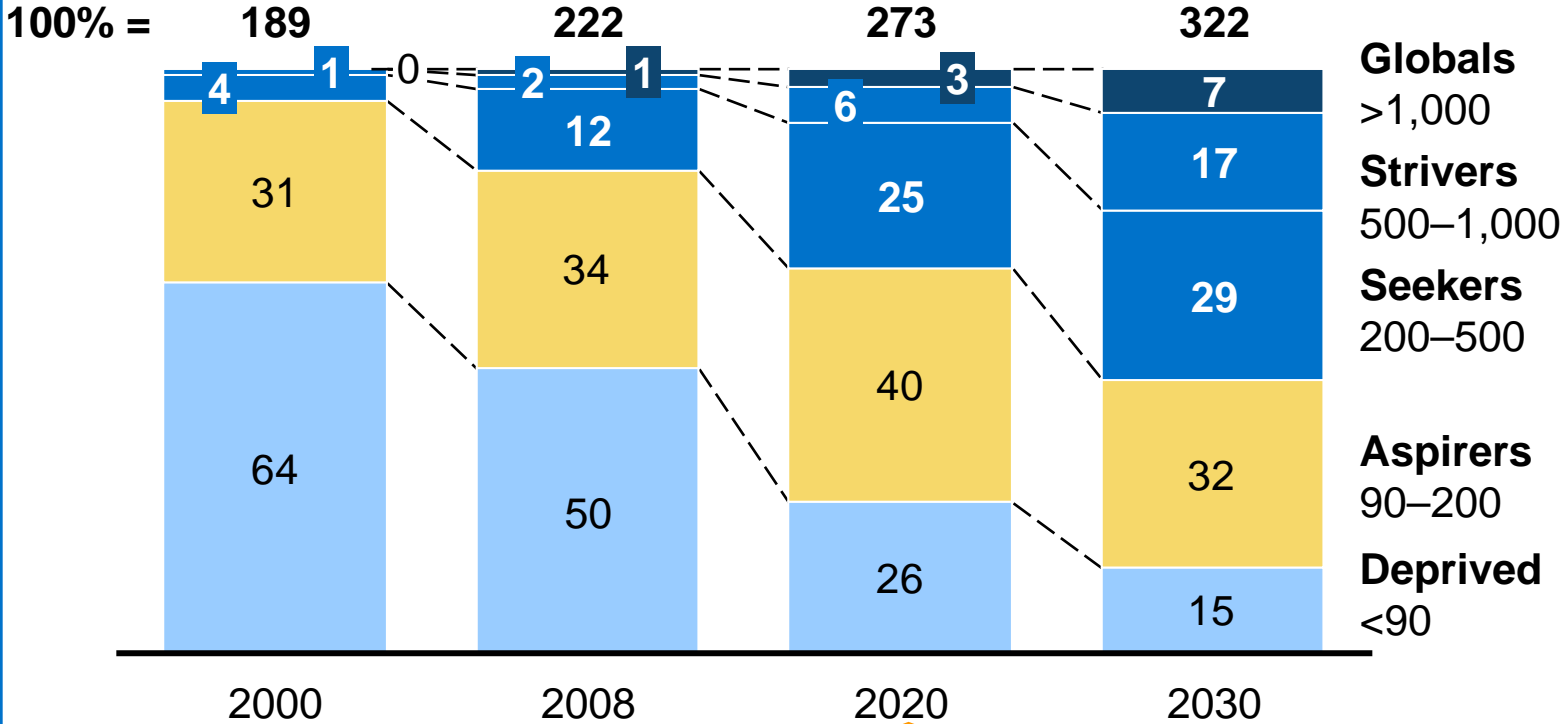
Middle class households swells from 10 million in 2000 to 148 million by 2030

1 Middle-class: Strivers and Seekers category

India's share-of-wallet will shift from basic necessities to discretionary items

- ☐ Discretionary spending
- ☐ Necessities

Share of average household consumption
Percent, thousand, `, at real prices 2000

	1995	2005	2015	2025	
Total	61	84	139	234	
Food, beverages and tobacco and apparel	59	48	38	29	
Housing and utilities	13	11	13	13	
Household products	2	3	4	5	
Personal products and services	6	11	12	12	
Transportation	11	14	18	23	
Communication	1	3	6	6	
Health care	4	5	4	6	
Education and recreation	3	4	6	6	
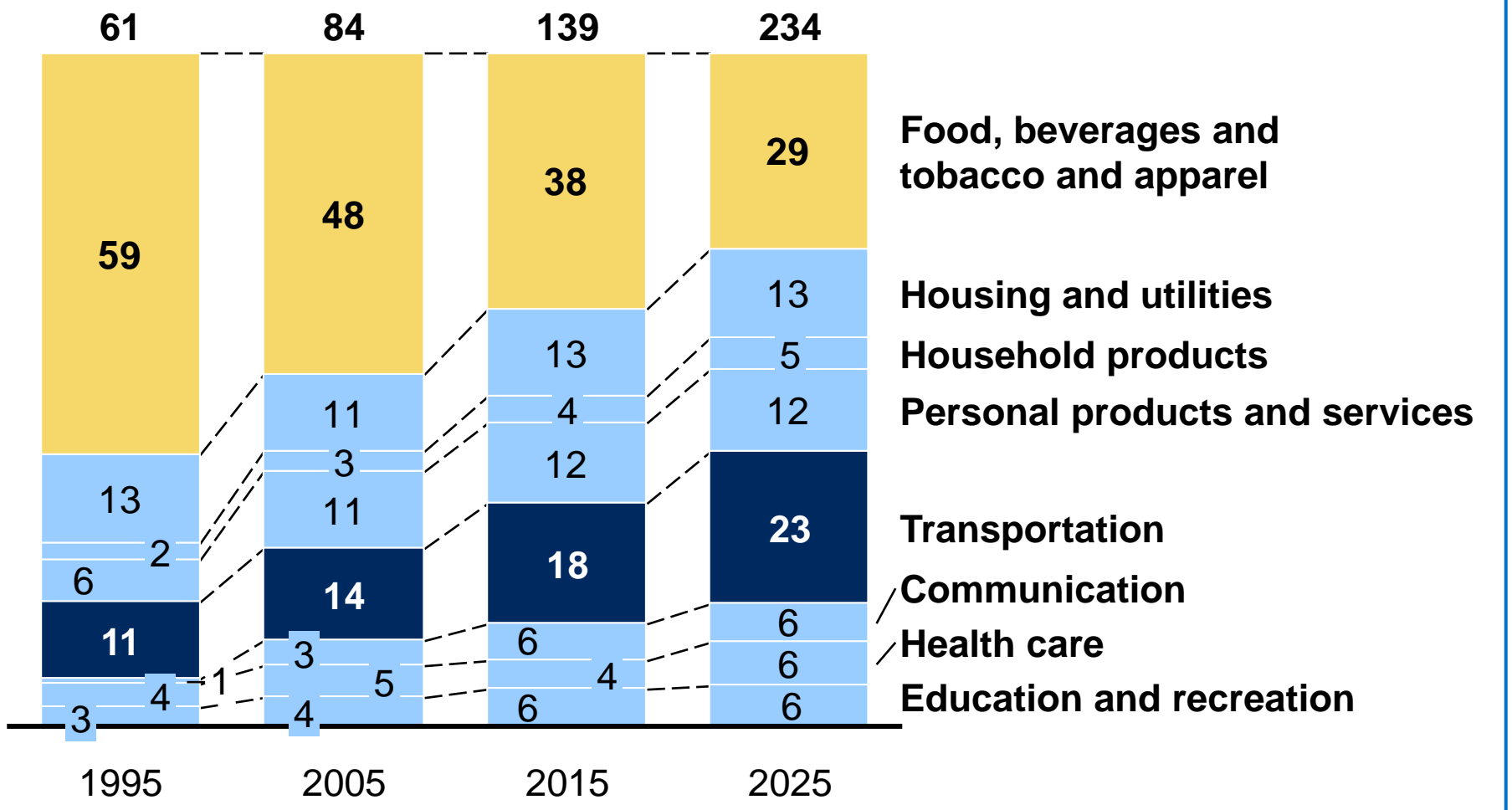
12 clusters will give access to 40% of the urban market

Emerging clusters

India can be disaggregated into 12 distinct clusters

Chandigarh

Delhi

Kanpur

Jaipur

Vododara

Ahmadabad

Surat

Nagpur

Kolkata

Mumbai

Pune

Vishakhapatnam

Hyderabad

Bangalore

Chennai

Kochi
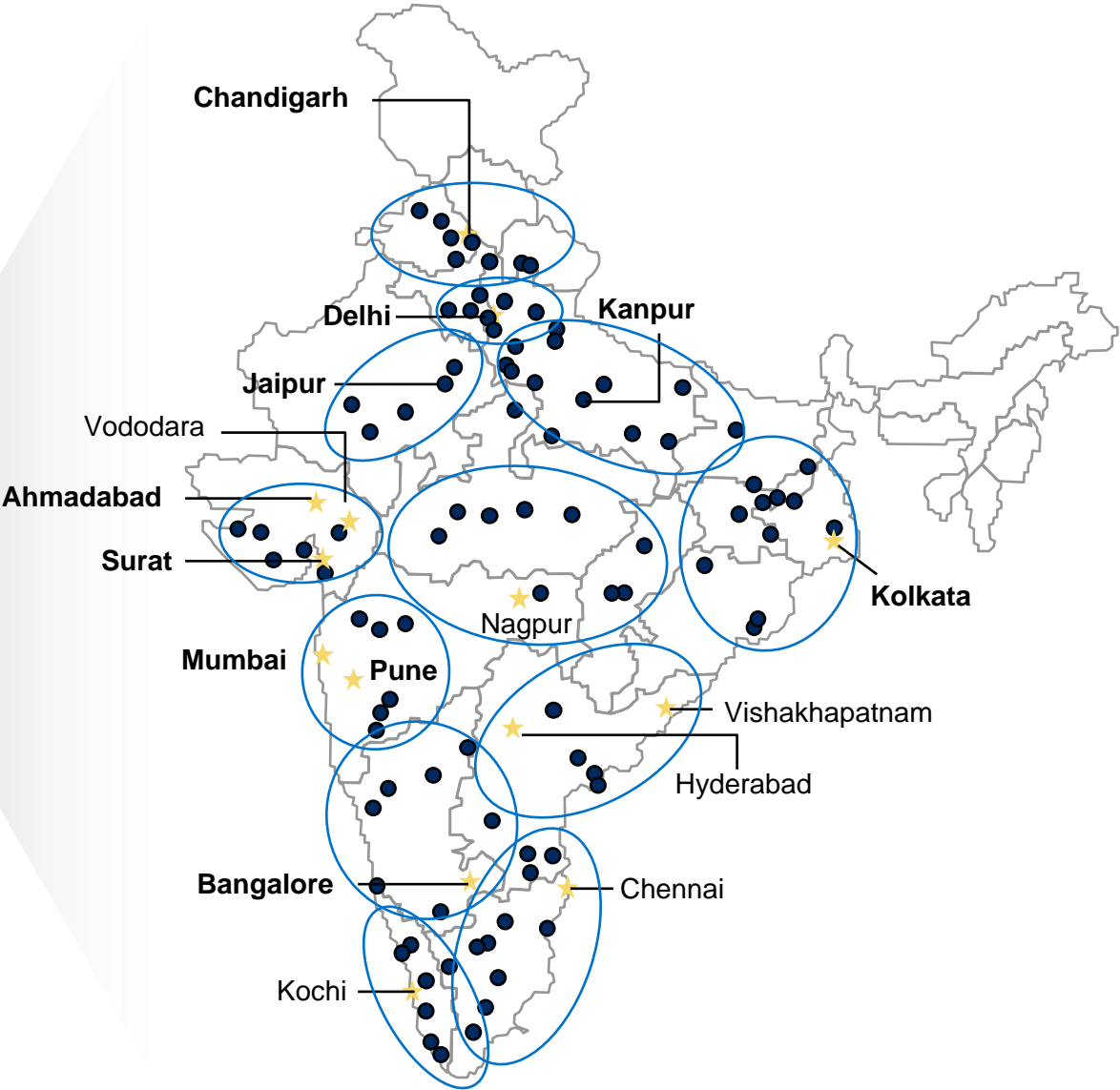
1 Not included as of now

India's urban operating model should focus on five key elements

Elements of operating model

1 Funding
Where will resources come from?

2 Governance
Who will lead and be accountable?

3 Shape
How will the country's population be distributed?

5 Planning
How will cities make and enforce land-use and transportation choices?

4 Sector policies
- Economic growth
- Affordable housing
- Sustainability and climate change mitigation
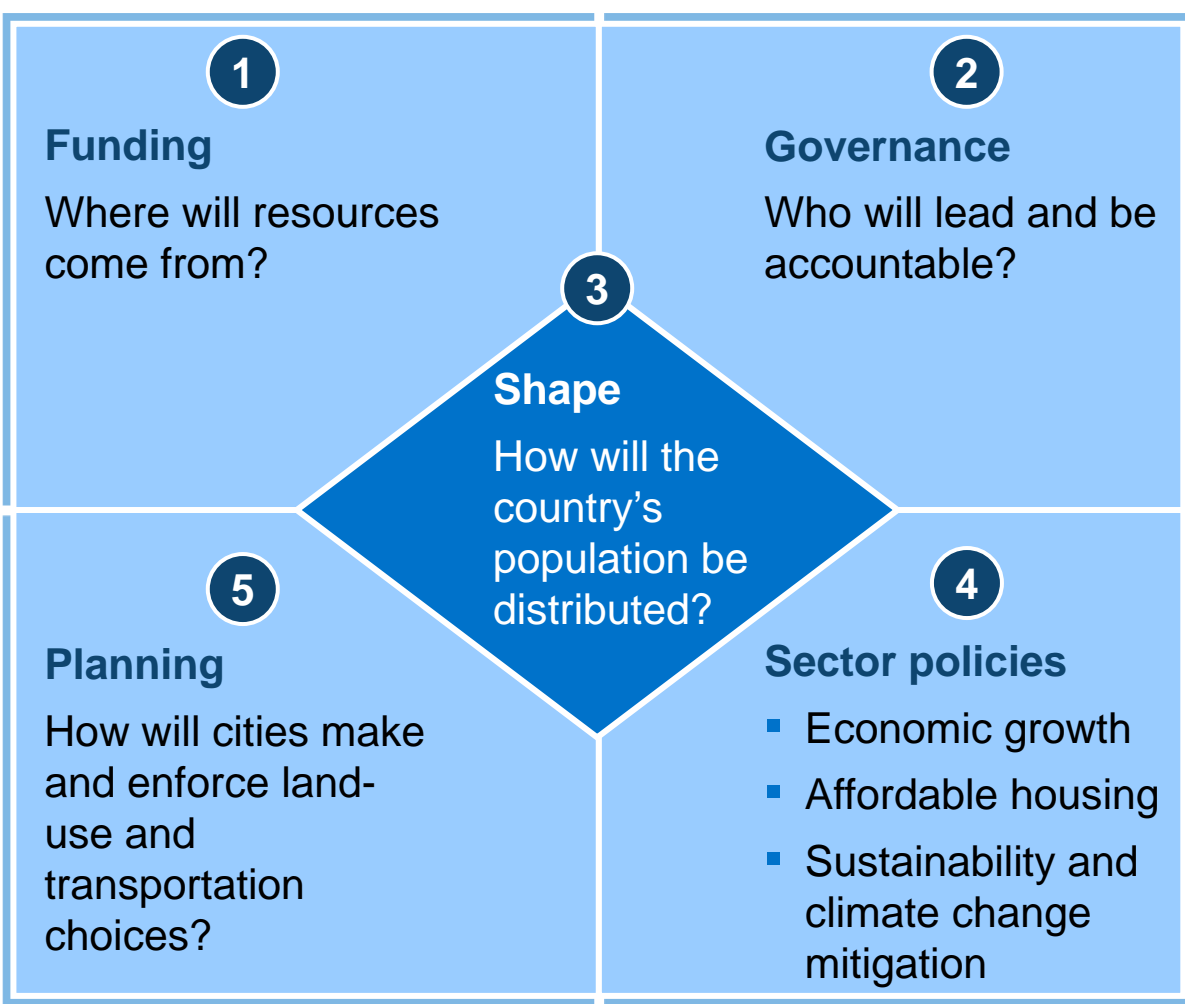
Indian cities need capital funding of USD 1.2 trillion over 20 years

USD per capita per annum

Capital expenditure

- 134 (Required)
- 17 (Current)

Funding requirement for urban sectors, 2010-2030
USD billion, 2008 prices

- Water: 96
- Sewage and sanitation: 68
- City roads: 231
- Mass transit: 392
- Afford-able housing[1]: 395
- **Total capex: 1,182**
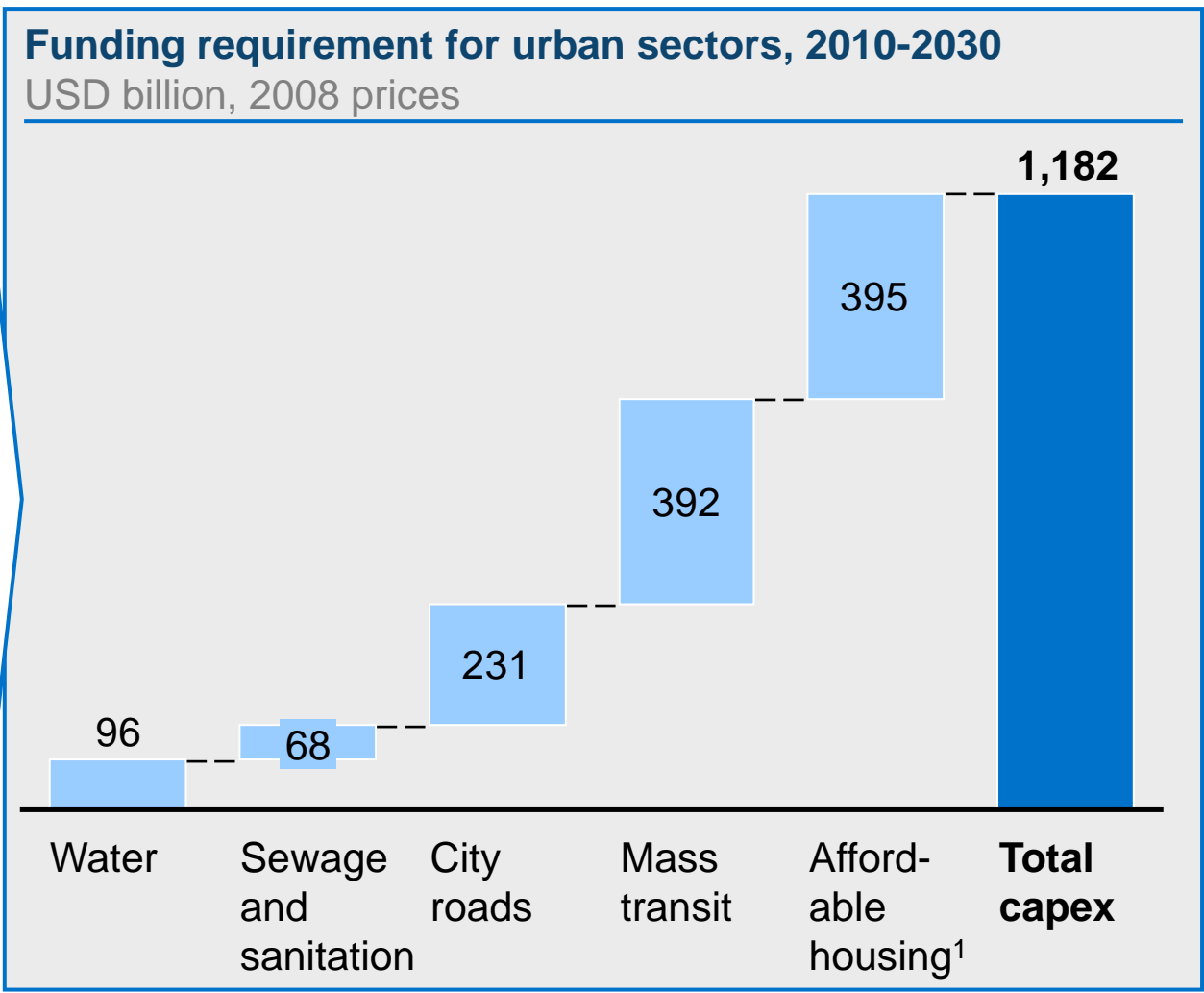
1 Net of beneficiary contribution

SOURCE: India urbanisation funding model; detailed project reports from the Jawaharlal Nehru National Urban Renewal Mission (JNNURM); McKinsey Global Institute analysis

India needs to leverage some new sources to satisfy urban funding requirements

CapEx
USD per capita per annum, 2008 prices

Monetising land	Debt and PPP	Formula based government grant	Total CapEx	CapEx required
58	26	43	127	134

- Initially JNNURM
- Later GST share
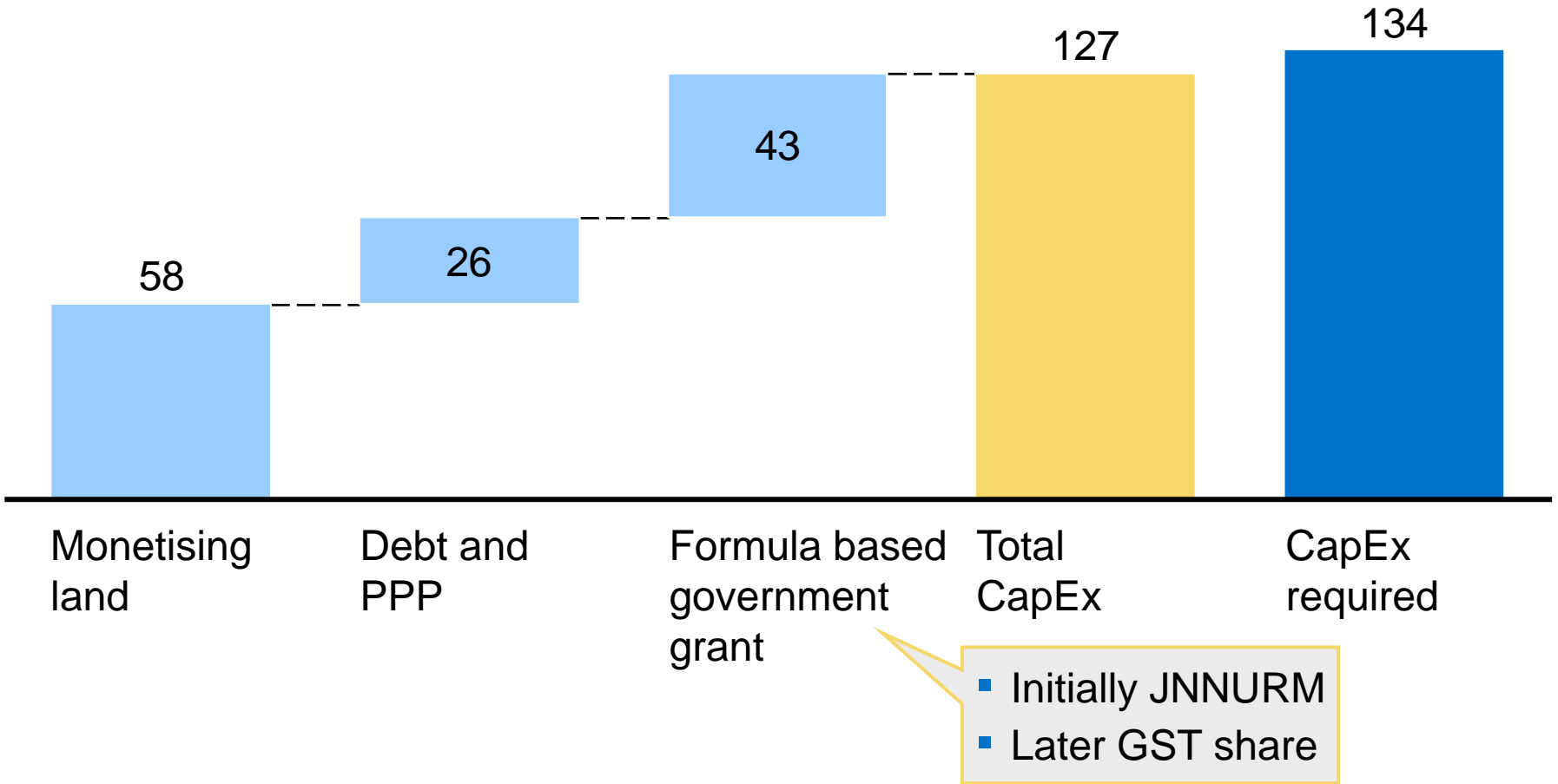
NOTE: Numbers may not sum due to rounding

Robust planning has been at the heart of urban transformations

Shenzhen (China)

Singapore

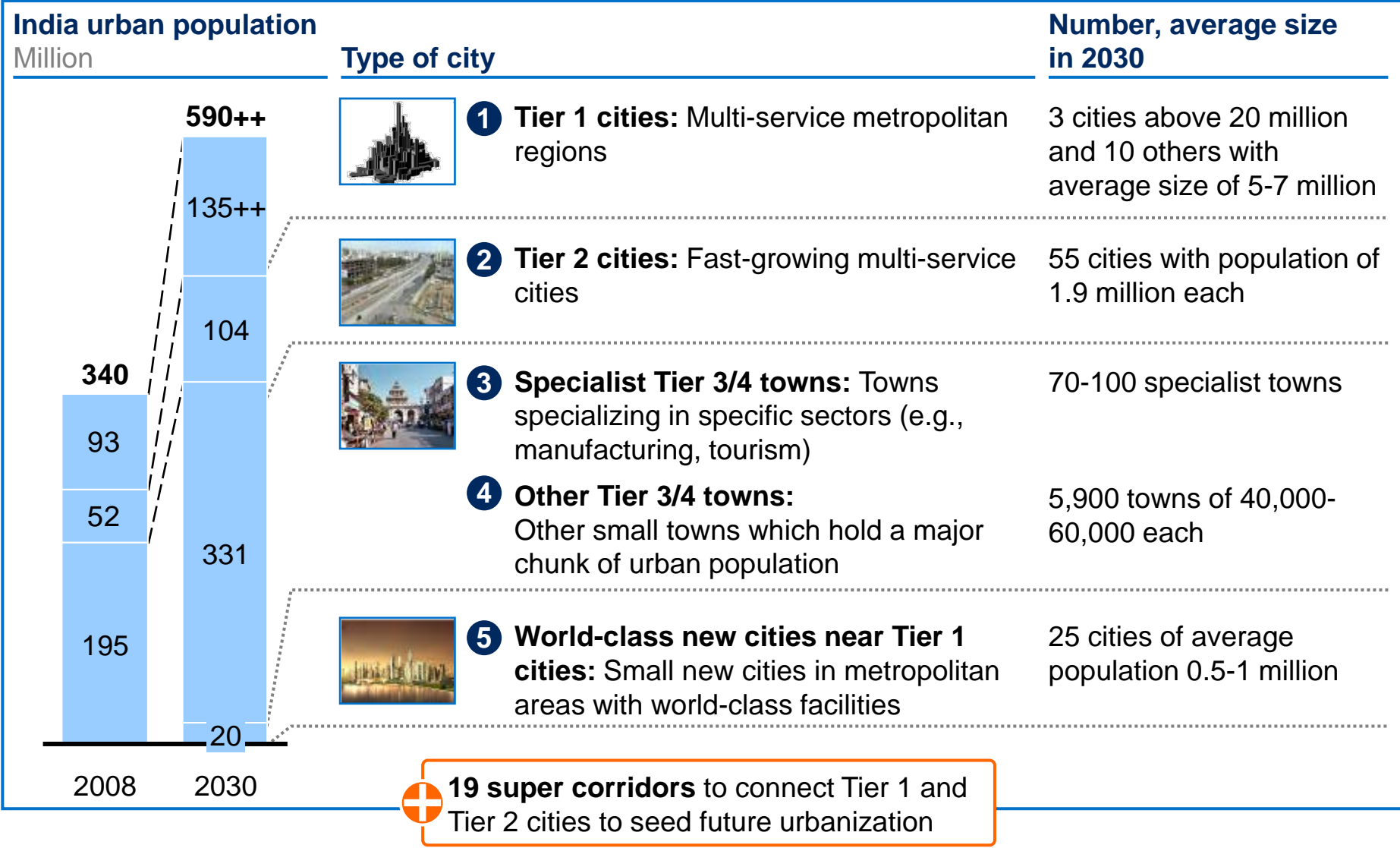# India needs to facilitate a planned portfolio of cities including greenfield cities

India urban population
Million

Type of city

Number, average size in 2030

590++	**1 Tier 1 cities:** Multi-service metropolitan regions	3 cities above 20 million and 10 others with average size of 5-7 million
135++	**2 Tier 2 cities:** Fast-growing multi-service cities	55 cities with population of 1.9 million each
104	**3 Specialist Tier 3/4 towns:** Towns specializing in specific sectors (e.g., manufacturing, tourism)	70-100 specialist towns
331	**4 Other Tier 3/4 towns:** Other small towns which hold a major chunk of urban population	5,900 towns of 40,000-60,000 each
20	**5 World-class new cities near Tier 1 cities:** Small new cities in metropolitan areas with world-class facilities	25 cities of average population 0.5-1 million

2008 column: 340, 93, 52, 195

2030 column: 590++, 135++, 104, 331, 20

2008   2030

⊕ **19 super corridors** to connect Tier 1 and Tier 2 cities to seed future urbanization

India needs to build 2 million low-income housing units per annum

10-fold increased build-out of low-income housing possible
Million

2

0.2

10x

2008   2030
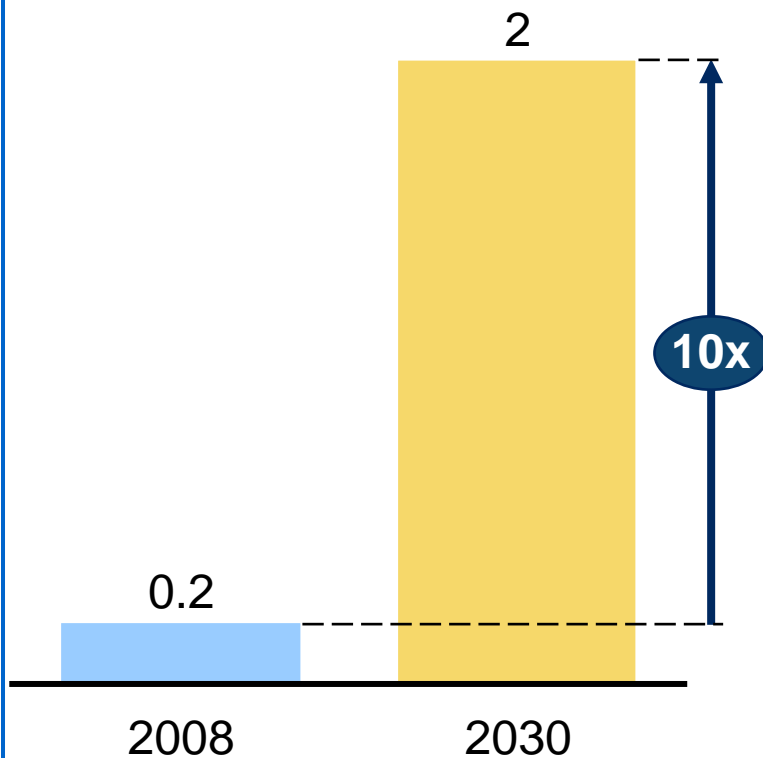
Need to find a policy sweet-spot across 6 areas

1 Additional FAR of upto 1

2 Capital Grant of ` 80,000 per house

3 Interest subsidy

4 National mortgage guarantee fund

5 30% stock for rental housing

6 Appropriate land use and land expansion policy

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Backup