

## Statistics and natural hazard risk for 50 selected megacities

Megacity	Country	Population (mill.) (1)		Area (km <sup>2</sup> ) (2)	City GDP in % of country's GDP (3)	Natural hazards (4)								Risk index (5)
		As at 2003	Forecast for 2015			Earthquake	Volcanic eruption	Tropical storm	Winter storm	Thunderstorm/hailstorm/tornado	Flood	Tsunami	Storm surge	
Tokyo	Japan	35.0	36.2	13,100	40	a	c	b	c	b	c	c	b	710.0
New York	USA	21.2	22.8	10,768	<10	c		c	b	b	c		c	42.0
Seoul, Incheon	South Korea	20.3	24.7	4,400	50	c		b	c	c	b			15.0
Mexico City	Mexico	18.7	20.6	4,600	40	a	a			b	c			19.0
São Paulo	Brazil	17.9	20.0	4,800	25					b	c			2.5
Mumbai	India	17.4	22.6	4,350	15	b		c		c	c		c	5.1
Los Angeles	USA	16.4	17.6	14,000	<10	a			c	b	b			100.0
Delhi	India	14.1	20.9	1,500	<5	b				b	b			1.5
Manila, Quezon	Philippines	13.9	16.8	2,200	30	a	b	a		b	b	b	c	31.0
Calcutta	India	13.8	16.8	1,400	<10	b		a		b	a		b	4.2
Buenos Aires	Argentina	13.0	14.6	3,900	45	c			c	b	b		b	4.2
Osaka, Kobe, Kyoto	Japan	13.0	13.2	2,850	20	a		b		b	b	c	b	92.0
Shanghai	China	12.8	12.7	1,600	<10	c		a		c	b		a	13.0
Jakarta	Indonesia	12.3	17.5	1,600	30	b	b	c		c	b	b	c	3.6
Dhaka	Bangladesh	11.6	17.9	1,500	60	a		a		b	a		c	7.3
Rio de Janeiro	Brazil	11.2	12.4	2,400	15			c		b	b			1.8
Karachi	Pakistan	11.1	16.2	1,200	20	a		c		c	b	c	b	3.1
Ruhr area	Germany	11.1	11.1	9,800	15	c			b	b	b			14.0
Cairo	Egypt	10.8	13.1	1,400	50	b				c	b			1.8
Beijing	China	10.8	11.1	1,400	<5	b				b	c			15.0
Lagos	Nigeria	10.7	17.0	1,100	30					b	c			0.7
Moscow	Russian Fed.	10.5	10.9	1,100	20					b	c			11.0
Paris	France	9.8	10.0	2,600	30				a	b	b			25.0
Istanbul	Turkey	9.4	11.3	2,650	25	a				b	b	c	c	4.8
Chicago	USA	9.2	10.0	8,000	<5	c			b	b	c	b	c	20.0
Lima	Peru	7.9	9.4	550	50	a				c	c	a		3.7
Washington, Baltimore	USA	7.6	8.6	9,000	<5			c	b	b	c		c	16.0
London	UK	7.6	7.6	1,600	15				a	b	b		b	30.0
Bogotá	Colombia	7.3	8.9	500	20	a				c	c			8.8
Teheran	Iran	7.2	8.5	500	40	a				b	c			4.7

None
  Low
  Medium
  High

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Jo'burg, East Rand	South Africa	7.1	8.5	17,000	30	c					b	c			3.9
San Francisco Bay	USA	7.0	7.7	8,000	<5	a			c	c	c				167.0
Randstad	Netherlands	7.0	8.0	4,000	50				a	b	b			b	12.0
Hong Kong	China	7.0	7.9	1,100	10	b		a		b	b	c		b	41.0
Bangkok	Thailand	6.5	7.5	500	35	c		c		b	b				5.0
Bangalore	India	6.1	8.4	300	Unknown	c				c	c				4.5
Bagdad	Iraq	5.6	7.4	500	Unknown	b				b	b				1.3
Santiago de Chile	Chile	5.5	6.3	950	15	b				c	c	c			4.9
St. Petersburg	Russian Fed.	5.3	5.2	600	<5					b	c	b		b	0.7
Madrid	Spain	5.1	5.3	950	20						b	c			1.5
Singapore	Singapore	4.3	4.7	300	100				c		b	c	c	c	3.5
Sydney	Australia	4.3	4.8	2,100	30	b				c	b	c		b	6.0
Milan	Italy	4.1	4.0	1,900	15	b				c	b	c			8.9
Miami	USA	3.9	4.5	2,900	<5				a		b	c		a	45.0
Alexandria	Egypt	3.7	4.5	100	Unknown	b					c	c	b	c	1.4
Abidjan	Ivory Coast	3.3	4.4	500	50						c	c			0.3
Berlin	Germany	3.3	3.3	900	<5						b	b	c		1.8
Athens	Greece	3.2	3.3	450	30	b					b	c		c	3.7
Medellin	Colombia	3.1	3.8	250	Unknown	b					b	c			4.8
Frankfurt area	Germany	2.7	2.7	2,900	<10	c					b	b	b		9.5

**A selection of 50 of the world's megacities: Population, area, size in economic terms, and natural hazards risk (listings based on population figures for 2003).**

None  Low  Medium  High

Sources:

- (1) UN 2004, Statistical authorities
- (2) Bronger 2004, Statistical authorities, ESRI 2003, various websites
- (3) Statistical authorities, various websites
- (4) Munich Re, 2004
- (5) Munich Re, Topics 2002