



Getting Geographic: Mapping Global Urbanization

Martha's Study Corner

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Every two years the Population Division of the United Nations Department of Economic and Social Affairs releases updated estimates and projections of the urban and rural population of every country in the world. According to the *2009 Revision of World Urbanization Prospects*, slightly more than half of the world's population lives in urban areas, but the distribution of major urban centers is uneven. (See <http://esa.un.org/unpd/wup/index.htm>.)



Udaipur, India

Surveying the Data

a) Distribute copies of **Activity #15-Handout 1** to the class. Review the definition of “urban agglomeration” found on page 2 of the handout. Have students survey the data in the table and make observations about changes in urban population from 1950-2010, as well as projections for 2025.

- i. How many urban agglomerations had a population greater than 10 million in 1950? Where were these urban areas?
- ii. Ask students to describe the changes in the number and location of urban agglomerations in 1975; 2000; and 2010.
- iii. What changes does the United Nations project for 2025?

Mapping the Data

b) Distribute blank world maps [available at: education.nationalgeographic.com/education/mapping/outline-map/] and atlases to the class. Have students work in pairs or small groups to locate and label the urban agglomerations for each time period included in the handout.

c) Encourage students to think about the best way to represent this data. For example, they might make five separate maps, one for each time period. Or they could develop a system of colored symbols to reflect population size and year. Remind students to include a descriptive title, key, and source on their maps.

Graphing the Data

d) Provide students with graph paper and have them create bar graphs for each continent, with a bar for the number of urban areas in each time period in the handout.

Extending the Activity

e) Have students write an essay that discusses changing patterns of urbanization from 1950-2025, using the handout, their maps, and their graphs as resources.

f) Have students choose one urban agglomeration from the 2025 list and research causes and challenges related to its projected growth.

World Urban Agglomerations with a Population >10 million

Year	Country	Urban Agglomeration ¹	Population (in millions)
1950	USA	New York-Newark	12.34
	Japan	Tokyo	11.27
1975	Japan	Tokyo	26.61
	USA	New York-Newark	15.88
	Mexico	Mexico City	10.69
2000	Japan	Tokyo	34.45
	Mexico	Mexico City	18.02
	USA	New York-Newark	17.85
	Brazil	Sao Paulo	17.10
	India	Mumbai	16.09
	India	Delhi	15.73
	China	Shanghai	13.22
	India	Kolkata	13.06
	Argentina	Buenos Aires	11.85
	USA	Los Angeles-Long Beach-Santa Ana	11.81
	Japan	Osaka-Kobe	11.17
	Brazil	Rio de Janeiro	10.80
	Bangladesh	Dhaka	10.28
	Egypt	Cairo	10.17
	Pakistan	Karachi	10.02
Russian Federation	Moscow	10.00	
2010	Japan	Tokyo	36.67
	India	Delhi	22.16
	Brazil	Sao Paulo	20.26
	India	Mumbai	20.04
	Mexico	Mexico City	19.46
	USA	New York-Newark	19.43
	China	Shanghai	16.58
	India	Kolkata	15.55
	Bangladesh	Dhaka	14.65
	Pakistan	Karachi	13.12
	Argentina	Buenos Aires	13.07
	USA	Los Angeles-Long Beach-Santa Ana	12.76
	China	Beijing	12.39
	Brazil	Rio de Janeiro	11.95
	Philippines	Manila	11.63
	Japan	Osaka-Kobe	11.34
	Egypt	Cairo	11.00
	Nigeria	Lagos	10.58
	Russian Federation	Moscow	10.55
	Turkey	Istanbul	10.52
France	Paris	10.49	

Year	Country	Urban Agglomeration ¹	Population (in millions)
2025	Japan	Tokyo	37.09
	India	Delhi	28.57
	India	Mumbai	25.81
	Brazil	Sao Paulo	21.65
	Bangladesh	Dhaka	20.94
	Mexico	Mexico City	20.71
	USA	New York-Newark	20.64
	India	Kolkata	20.11
	China	Shanghai	20.02
	Pakistan	Karachi	18.73
	Nigeria	Lagos	15.81
	Dem. Rep. of the Congo	Kinshasa	15.04
	China	Beijing	15.02
	Philippines	Manila	14.92
	Argentina	Buenos Aires	13.71
	USA	Los Angeles-Long Beach-Santa Ana	13.68
	Egypt	Cairo	13.53
	Brazil	Rio de Janeiro	12.65
	Turkey	Istanbul	12.11
	Japan	Osaka-Kobe	11.37
	China	Shenzhen	11.15
	China	Chongqing	11.07
	China	Guangzhou, Guangdong	10.96
	France	Paris	10.88
	Indonesia	Jakarta	10.85
	Russian Federation	Moscow	10.66
	Colombia	Bogota	10.54
	Peru	Lima	10.53
Pakistan	Lahore	10.31	

¹ Urban agglomeration refers to the population contained within a contiguous territory inhabited at urban density levels without regard to administrative boundaries. It usually incorporates the population in a city or town plus that in the suburban areas lying outside of but adjacent to the city boundaries.

Source: United Nations, Department of Economic and Social Affairs, Population Division (2010). *World Urbanization Prospects: The 2009 Revision*. Available online at <http://esa.un.org/unpd/wup/index.htm>.