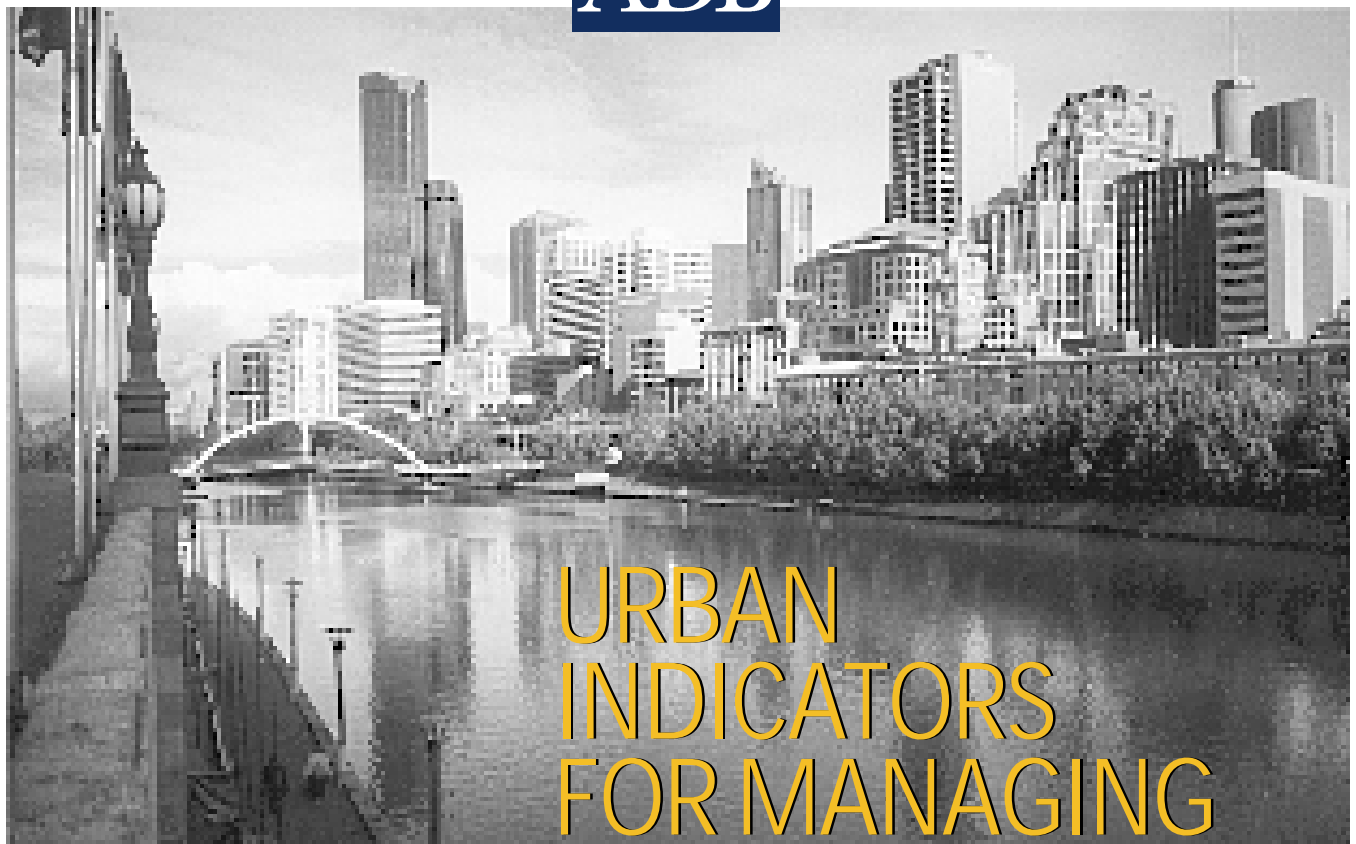


ADB



# URBAN INDICATORS FOR MANAGING CITIES

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CITIES DATA BOOK

Asian Development Bank

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# Abbreviations and Acronyms

## Organizational Terms

ADP	Annual Development Program (Bangladesh)	DHS	Department of Health Services (Nepal)
ARMM	Autonomous Region of Muslim Mindanao (Philippines)	Digitel	Digital Telecommunications Philippines, Inc.
Bayantel	Bayan Telecommunications Corporation (Philippines)	DILG	Department of Interior and Local Government (Philippines)
BIR	Bureau of Internal Revenue (Philippines)	DOH	Department of Health (Philippines)
BDA	Bangalore Development Authority	DOLE	Department of Labor and Employment (Philippines)
BRTC	Bangladesh Road Transport Corporation	DOR	Department of Roads (Nepal)
BTTB	Bangladesh Telegraph and Telephone Board	DOST	Department of Science and Technology (Philippines)
CAR	Cordillera Autonomous Region (Philippines)	DOT	Department of Tourism (Philippines)
CB (BSP)	Central Bank of the Philippines (Bangko Sentral ng Pilipinas)	DPWH	Department of Public Works and Highways (Philippines)
CBOs	community-based organizations	EHDAG	Environment Health Development and Advisory Group (Nepal)
CBS	Central Bureau of Statistics (Nepal)	EMB	Environmental Management Bureau (Philippines)
CCP	China Communist Party	ENRO	Environment and Natural Resources Office (Philippines)
CDPS	Central Department for Population Studies (Nepal)	EPD	Environment Protection Department (Hong Kong)
CEA	Central Environment Authority (Sri Lanka)	ERLTS	Elevated Light Rail Transit Systems (India)
CHED	Commission on Higher Education (Philippines)	ESAs	external support agencies
CIS	Commonwealth of Independent States	EU	European Union
CMC	City Municipal Council (India)	FEZ	Free Economic Zone (Kyrgyz Republic)
CMC	Colombo Municipal Council	GOI	Government of Indonesia
Comelec	Commission on Elections (Philippines)	GSIS	Government Service Insurance System (Philippines)
CONCERN	Estimation of Concern for Children in Nepal	GTZ	German Agency for Technical Cooperation Ltd.
CPN-UML	Communist Party of Nepal Unified Marxist-Leninist	GUO	Global Urban Observatory
CPPCC	Chinese People's Political Consultative Conference	HART	Housing Assistance and Relief Trust (Fiji)
CSC	Civil Service Commission (Philippines)	HCDC	Housing and Community Development Council (Sri Lanka)
CSD	Commission on Sustainable Development	HKSAR	Hong Kong Special Administrative Region
CSCE	Conference on Security and Cooperation in Europe	HLURB	Housing and Land Use Regulatory Board (Philippines)
CSSA	Comprehensive Social Security Assistance	HMDF	Home Mutual Development Fund/Pag-IBIG Fund (Philippines)
CUP	Coalition of Urban Poor (Bangladesh)	HUDCC	Housing and Urban Development Coordinating Committee (Philippines)
CWHKTT	Cable and Wireless HKT Telephone Ltd (formerly Hong Kong Telephone Company Ltd)	ICIMOD	International Center for Integrated Mountain Development
CWIN	Child Workers in Nepal	ICLEI	International Council on Local Environmental Initiative
DAEP	Depressed Area Electrification Project (Philippines)	IMAR	Inner Mongolia Autonomous Region (PRC)
DECS	Department of Education, Culture and Sports (Philippines)	IMF	International Monetary Fund
DENR	Department of Environment and Natural Resources (Philippines)	ISIC	International Standards Industry Classification
		Islacom	Island Communications, Inc. (Philippines)

IUCN	International Union for Conservation of Nature and Natural Resources	SP	Sangguniang Panlungsod (Philippines)
JICA	Japan International Cooperation Agency	SSS	Social Security System (Philippines)
KCRC	Kowloon-Canton Railway Corporation (Hong Kong)	STP	Sustainable Township Program (Sri Lanka)
KHB	Kartanaka Housing Board	SWS	Social Weather Station (Philippines)
LGA	local government area	TEPA	Traffic Engineering and Planning Agency
LGC	Local Government Code (Philippines)	TGC	Titas Gas Company (Bangladesh)
LGUs	Local government units (Philippines)	TMC	Town Municipal Council (Bangalore)
LTO	Land Transportation Office (Philippines)	TNCs	Transnational Corporations (Hong Kong)
MERALCO	Manila Electric Company	TUGI	The Urban Governance Initiative (UNDP)
MHPP	Ministry of Housing and Physical Planning (Nepal)	UES	Urban Environmental Sanitation (Pakistan)
MMDA	Metro Manila Development Authority (Philippines)	UK	United Kingdom
MTR	Mass Transit Railway Corporation (Hong Kong)	ULCs	Urban Local Councils (Pakistan)
MUDHC	Ministry of Urban Development, Housing and Construction (Sri Lanka)	UN	United Nations
NAIA	Ninoy Aquino International Airport	UNCHS	UN Commission on Human Settlements
NC	Nepali Congress	UNCHS-Habitat	UN Centre for Human Settlements – Habitat
NCR	National Capital Region (Philippines)	UNDP	United Nations Development Programme
NCSO	National Census and Statistics Office (Philippines)	UNEP	United Nations Environment Programme
NEA	Nepal Electricity Authority	UNESCO	United Nations Educational, Scientific and Cultural Organization
NGOs	non-government organizations	UNICEF	United Nations Children's Fund
NHMFC	National Housing and Mortgage Finance Corporation (Philippines)	UNTAC	United Nations Transitional Authority in Cambodia
NTC	National Telecommunications Commission (Philippines)	USA	United States of America
NTC	Nepal Telecommunication Corporation	USAID	U.S. Agency for International Development
NTL	National Trading Limited (Nepal)	USSR	Union of Soviet Socialist Republics
NSCB	National Statistical Coordination Board (Philippines)	VSNL	Videsh Sanchar Nigam Limited (India)
NSO	National Statistics Office (Philippines)	WASA	Water and Sanitation Agency (Pakistan)
NSSO	National Sample Survey Organization (India)	WAPDA	Water and Power Development Authority (Pakistan)
NWFP	Northwest Frontier Province (Pakistan)	WB	World Bank
NWSC	Nepal Water Sewerage Corporation	WECS	Water and Energy Commission Secretariat (Nepal)
OECD	Organization for Economic Cooperation and Development	WHO	World Health Organization
PADS	Port and Airport Development Strategy (Hong Kong)		
PAG-ASA	Philippine Atmospheric Geophysical Astronomical Service Administration	<b>Technical Terms</b>	
PESO	Public Employment Services Office (Philippines)	ACP	Airport Core Program
Piltel	Pilipino Telephone, Inc. (Philippines)	AMPS/DAMPS	Advance Mobile Phone Service/ Digital Advance Mobile Phone Service
PLDT	Philippine Long Distance Telephone Company	BOD	Biological Oxygen Demand - measure of amount of organic pollution in water
PNP	Philippine National Police	BOT	build-operate-transfer
PNR	Philippine National Railways	CBD	central business district
POPCOM	Population Commission (Philippines)	CDB	Cities Data Book
POS	people's organizations	CDI	City Development Index
PPA	Philippine Ports Authority	CEROI	Cities Environment Reports in the Internet
PMDFC	Pakistan Municipal Development Fund Company	CNG	Compressed Natural Gas
PRC	People's Republic of China	CO	Carbon Monoxide
PTC	Pakistan Telecommunications Corporation	CO <sub>2</sub>	Carbon Dioxide
RAJUK	Rajdhani Unnayan Kartripakha or Capital Development Authority (Bangladesh)	CPI	consumer price index
SLTelecom	Sri Lanka Telecommunications	DMCs	developing member countries
SMART	Smart Communications, Inc. (Philippines)	EIA	Environmental Impact Assessment (Hong Kong)
SOEs	state-owned enterprises (Vietnam, PRC Cambodia)	EMRs	extended metropolitan regions
		EO	Executive Order (Philippines)
		EUMM	Extended Urban Metabolism Model Framework

GCP	gross city product (Philippines)
GDP	gross domestic product
GIS	geographical information system
GIS	global information system
GNP	gross national product
GSM	Global Satellite for Mobile
HDI	United Nations Human Development Index
IDD	International Direct Dialing
ISPs	Internet Service Providers
IRA	Internal Revenue Allotment
LPG	Liquid Petroleum Gas
LRT	Light Rail Transit
MRH	medium rise housing
NDD	National Direct Dialing
NO <sub>2</sub>	Nitrogen Dioxide
NO <sub>x</sub>	Nitrogen Oxide
O <sub>3</sub>	Ozone
PABX	Private Automatic Branch Exchange
Pb	Lead
PD	Presidential Decree (Philippines)
PM <sub>10</sub>	Particulate Matter with a mass medium aerodynamic diameter less than 10 micrometers (um)
PMI	Performance Measurement Indicators
POS	point of sales
PPP	Purchasing Power Parity
RA	Republic Act (Philippines)
RETA	Regional Technical Assistance
SAR	Special Administrative Region
SCATS	Sydney Coordinated Adaptive Traffic System
SO <sub>2</sub>	Sulfur Dioxide
SPM	Suspended Particulate Matter
SRP	South Reclamation Project
STD	Standard Telephone Dialing
TNCs	Transnational Corporations
SWM	solid waste management
UPS	Uninterrupted Power Supply
VOC	Volatile Organic Compound

#### Measurement Units

cu m	cubic meter
Gj	gigajoules
Hz AC	alternating current in hertz
kltr	kiloliter
kWhr	kilowatt hour
ug/m <sup>3</sup>	micrograms per cubic meter
mld	million liters per day
mt/mT	metric tons
m <sup>2</sup>	square meter
m <sup>3</sup>	cubic meter
mwh	megawatt hour
t/annum	tons per annum
teu	twenty-foot equivalent units
v	volts
v/c	volume per capacity
vph	volume per hour

# Foreword

**T**he fast pace of urbanization in the Asian and Pacific region is a critical element of life in the Asian Development Bank's developing member countries (DMCs). Already one third of the region's population of some 3.5 billion is living in urban areas and the share is forecast to increase by 54 percent by 2020. In fact, the majority of the new urban growth will be in Bangladesh, People's Republic of China, India, Indonesia, and Pakistan. Another feature of urbanization in Asia is the growth of megacities, urban areas of ten million or more population, in many cases surrounded by extended metropolitan regions extending up to 100 kilometers from the central built-up area. There are already nine megacities in the region, and 17 are forecast by 2015. This massive transformation of societies is having both positive and negative effects. On the positive side, growing urban centers can take advantage of agglomeration economies and globalization trends to generate jobs and increase incomes. It is forecast that over 80 percent of Asia's economic growth will come from its urban areas. On the negative side, some cities undergoing rapid growth are suffering from inadequate infrastructure and services, severe environmental degradation, increasing traffic congestion, and proliferation of slums and squatter settlements.

In many cities in Asia, rapid growth has outpaced the abilities and resources of city

administrators to maintain adequate provision of services. Other trends are exacerbating the situation. Increasing decentralization and complexities of management are extending the responsibilities of local governments, but without the necessary additional financial or human resources. Moreover, the expectations of residents and other customers concerning lower cost and higher quality services are increasing, but the required level of resources may not be available. In part answer to the resource gap, private sector participation in the provision of services is increasing. At the same time, governments' roles are moving away from directly providing services to an enabling role that emphasizes coordinating, regulating, monitoring, and supporting the private sector.

Social and economic development of urban areas is increasingly focused on local government management, with private sector participation. Consequently, local governments are expected to be an important focus of ADB's governance and capacity building work during the next decade. However, most cities in its DMCs are suffering from inadequate data and information, which has undermined their ability to understand the complex forces shaping their cities and to develop and test effective urban policies.

These inadequacies affect many elements of urban management, strategic and sector planning, private sector involvement and more. For example, major economic data that

In many cities in Asia, rapid growth has outpaced the abilities and resources of city administrators to maintain adequate provision of services.

measure the health of an urban economy, such as city product, investment, income disparity and financial status, are seldom collected. Data on population growth, rural-urban migration, infrastructure and the environment are not available in a single location, or in a consistent format. Other data are not collected at all, such as distribution of job opportunities and city spatial structure. Scant information is available to help understand the relationship between policy initiatives and urban outcomes, or between the performance of specific subsectors and broader social and economic development. City managers are missing out on opportunities to improve coverage and targeting of services, and operational performance in urban management. Cities can use the data to establish performance benchmarks for setting service standards or objectives, become more customer-focused, identify best practice, exchange information, and compare progress with other cities.

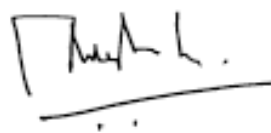
While the World Bank, the United States Agency for International Development, and the Global Urban Observatory program of the United Nations Center for Human Settlements have been involved in developing urban indicators, a large gap has remained until now. Recognizing the urgent need to fill the gap, ADB approved this regional technical assistance (RETA) on *Development of the Cities Data Book for the Asian and Pacific Region* in June 1999. The RETA recognized the need to focus on the role of improved data, indicators, and benchmarking in managing fast growing cities in the region and to work closely with some of those cities to improve their operational efficiency. The project was designed to remedy the endemic data shortfalls and to demonstrate the application of indicators to urban policy formulation and implementation.

The objective of the RETA was to establish a policy-oriented urban indicators database for research, policy formulation, monitoring of the development impact of interventions in the urban sector, comparison of performance between cities, and improving the efficiency of urban service delivery. The RETA developed methodologies and criteria

to measure and evaluate the efficiency of urban service delivery, and a network to exchange information on the quality and efficiency of service delivery and urban management between cities.

The outputs of the RETA are summarized in this publication. A workshop was held in September 1999 attended by city officials and agency heads of the 18 participating cities, ADB staff, and observers and guests from a number of multilateral and bilateral development agencies. The workshop participants agreed on the choice of indicators and data to be collected in the selected cities. A second workshop was held in February 2001, which explored how the exercise may be carried forward and integrated into ADB's operations. In addition to the publication of the book, production of a CD-ROM and installation of a website that highlights CDB RETA outputs have been undertaken.

We are pleased to commend the *Cities Data Book: Urban Indicators for Managing Cities* to all those involved in managing the urban sector, in Asia and throughout the world, particularly to those interested in the use of indicators and benchmarking. Cities in Asia and the Pacific face a host of challenges to urban management and we are confident that this report, and the networking that will take place among the cities, will be important tools for meeting those challenges.



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# Preface

The regional technical assistance (RETA) for the *Development of the Cities Data Book for the Asian and Pacific Region* was approved in June 1999 and consultancy services were provided from August 1999 to February 2001. The work was undertaken in four phases, which necessarily overlapped.

In Phase I, lasting five months, preparations were made for an initial workshop with participants from the 18 participating cities, ADB staff, and resource persons. An indicators questionnaire was prepared and pilot-tested in selected cities in the Philippines. The shortlist of participating cities was finalized before the workshop, while recruitment of domestic consultants in ADB's developing member countries was completed in February 2000. Officials from the cities assisted the CDB team in drawing up the shortlist of domestic consultants.

The selected participating cities in the region are as follows:

- Bangalore (India)
- Bishkek (Kyrgyz Republic)
- Cebu, Mandaluyong, Naga (Philippines)
- Colombo (Sri Lanka)
- Dhaka (Bangladesh)
- Hanoi (Viet Nam)
- Hohhot (People's Republic of China)
- Hong Kong (People's Republic of China)
- Kathmandu (Nepal)
- Lahore (Pakistan)
- Medan (Indonesia)

- Melbourne (Australia)
- Phnom Penh (Cambodia)
- Seoul (Republic of Korea)
- Suva (Fiji Islands)
- Ulaanbaatar (Mongolia)

In Phase II, lasting over six months, the main fieldwork of data collection was carried out, including checking of sources and data by the CDB team at ADB headquarters in Manila.

In Phase III, three senior resource persons were recruited to prepare papers on (i) Asia's Urban Future, (ii) Urban Indicators and the Management of Cities, and (iii) Comparing the Cities Data Base. In parallel, a summary of ADB's policy in the urban sector was prepared and commentaries made on data presented in the book. Data collected from the cities were tabulated and organized for further comparison and analysis. This phase was carried out over three months.

Phase IV, covering the editing, publishing, printing, and distribution of the book, was completed in over four months. This phase was capped by a dissemination workshop in February 2001, where city officials and urban managers met to discuss the relevance of urban indicators in city management and learn from cities that have undertaken a similar exercise.

The *Cities Data Book: Urban Indicators for Managing Cities* is designed firstly for policymakers and urban managers of cities in the Asian and Pacific region. It should also

*The Cities Data Book:*

*Urban Indicators for*

*Managing Cities* is

designed firstly for

policymakers and urban

managers of cities in the

Asian and Pacific region.

be valuable to the work of community-based and nongovernment organizations, businesses, as well as ADB staff, consultants, and other professionals involved in using urban indicators and performance benchmarking. The exercise intended to establish a cadre of city-level information resource persons and a network of city managers who are prepared to devote at least some resources to using urban indicators and benchmarking in their work, and to trigger reforms in their city environment. The network will act as the information and dissemination point for best practice, contacts for other organizations involved in the use of indicators, and advice to urban management professionals and others in civil society.

Being an initial effort in collecting city level data, the results may not be statistically foolproof. Despite the RETA team's efforts to standardize definitions of the indicators, certain city nuances and local practices have emerged. For this reason, the "Notes and Sources" section of this book explains the figures. The Notes may also provide a fuller understanding of how the city manages its urban affairs.

The RETA, its two workshops and this report would not have succeeded without the hard work, professionalism, and enthusiasm of the participants from the 18 cities. ADB expresses its appreciation to all participants and resource persons. We express our thanks for the hard work and dedication of the members of the RETA team—Matthew Westfall, Senior Urban Development Specialist/RETA Coordinator who conceptualized and led this intensive exercise; Victoria de Villa, who managed the RETA's day-to-day

affairs; and consultants Giles Clarke and Joe Flood. Special thanks goes to the CDB staff Lora Lynn de Leon, Michelle Tan, Jennifer Vicedo, Karen Guzman, Ram Cabrera who was responsible for the layout and design of the book, and Stuart Sell who edited the publication.

We are also particularly honored by the participation of theme paper writers, notably Sir Peter Hall, Professor of Planning at University College London; Terrence Gary McGee, Professor at Institute of Asian Research, University of British Columbia; and Peter Newton, Chief Research Scientist, Commonwealth Scientific and Industrial Research Organization and Associate Director of the Australian Housing and Research Institute.

In conclusion, I thank all those who have contributed to the success of the RETA, including the mayors, city managers and staff of municipal offices, the local consultants based in each city, utility companies, and the many other organizations in the public and private sectors. I hope this will be the first phase of a sustained structure for research, capacity building, and dissemination of knowledge on the use of urban indicators in city management so urgently needed in the region.



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