Cities of the World

World Regional Urban Development

FOURTH EDITION

EDITED BY
STANLEY D. BRUNN, MAUREEN HAYS-MITCHELL, AND DONALD J. ZIEGLER

CARTOGRAPHY BY
ELLEN R. WHITE

ROWMAN & LITTLEFIELD PUBLISHERS, INC.
Lanham • Boulder • New York • Toronto • Plymouth, UK

ROWMAN & LITTLEFIELD PUBLISHERS, INC.

Published in the United States of America
by Rowman & Littlefield Publishers, Inc.
A wholly owned subsidiary of The Rowman & Littlefield Publishing Group, Inc.
4501 Forbes Boulevard, Suite 200, Lanham, Maryland 20706
www.rowmanlittlefield.com

Estover Road, Plymouth PL6 7PY, United Kingdom

British Library Cataloguing in Publication Information Available

Library of Congress Cataloging-in-Publication Data
Cities of the world : world regional urban development / edited by Stanley D. Brunn, Maureen Hays-Mitchell, and Donald J. Zeigler ; cartography by Ellen R. White.
p. cm.
Includes bibliographical references and index.
ISBN-13: 978-0-7425-5597-6 (cloth : alk. paper)
ISBN-10: 0-7425-5597-6 (cloth : alk. paper)
1. Cities and towns. 2. City planning. 3. Urbanization. 4. Urban policy. I. Brunn, Stanley D. II. Hays-Mitchell, Maureen. III. Zeigler, Donald J., 1951- IV. White, Ellen R.
HT151.C569 2008
307.76—dc22
2008013566

Printed in the United States of America

The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences—Permanence of Paper for Printed Library Materials, ANSI/NISO Z39.48-1992.

List of Illustrations

Preface

Contents

Figure 3.1 Major Cities of Middle America and the Caribbean. *Source:* Data from UN, *World Urbanization Prospects: 2005 Revision*, http://esa.un.org/unup/.

3

Cities of Middle America and the Caribbean

IRMA ESCAMILLA, JOSEPH L. SCARPACI, AND ADRIÁN GUILLERMO AGUILAR

KEY URBAN FACTS

Total Population	186 million
Percent Urban Population	69%
Total Urban Population	128 million
Most Urbanized Countries	Guadeloupe (99.8%)
	Martinique (97.9%)
	Puerto Rico (97.6%)
Least Urbanized Countries	Trinidad and Tobago (12.2%)
	Montserrat (13.5%)
	St. Lucia (27.6%)
Annual Urban Growth Rate	1.7%
Number of Megacities	1
Number of Cities of More Than 1 Million	17
Three Largest Cities	Mexico City, Guadalajara, Monterrey
World Cities	Mexico City

KEY CHAPTER THEMES

1. The Mexican urban system was forged in large measure by the Aztec pattern of urbanization. It was subjugated militarily by the Spanish to facilitate the colonizers' dual mission of proselytizing and mining.
2. It was not until the second half of the 19th century that new important regional centers emerged, stimulated by foreign investment and the development of railways and highways.
3. Between 1900 and 1940, the urban population of Mexico grew at a rate far greater than that of the Mexican population in general; most urban growth was concentrated in the larger cities of Mexico.

Figure 3.1 Major Cities of Middle America and the Caribbean. *Source:* Data from UN, *World Urbanization Prospects: 2005 Revision*, http://esa.un.org/unup/.

Cit

IR

Total Populatio

Percent Urban

Total Urban Po

Most Urbanize

Least Urbanize

Annual Urban

Number of Meg

Number of Citi

Three Largest C

World Cities

1. The Mexica
tion. It was
proselytizin
2. It was not
ters emerge
highways.
3. Between 19
of the Mexi
cities of Mex

4. Today, urban growth in Mexico is occurring in intermediate cities located close to large cities, in cities along the U.S.–Mexican border, and in independent cities in remote regions far from the large agglomerations.
5. The urban systems of Central America and the Caribbean developed under various European powers and followed an agricultural-driven model of colonial and post-colonial growth.
6. Today, Central America is nearly 70% urban, ranging from approximately 45% in Honduras and Guatemala to 59% and 66% in Costa Rica and Panama, respectively. National poverty rates parallel urbanization rates in that the poorest countries are the least urbanized countries.
7. Social and geographic segregation has deepened in Central America's cities; crime and violence are serious problems.
8. Four patterns highlight contemporary urbanization in the Caribbean: urban primacy characterizes every island; the number of cities with 1 to 5 million residents has more than doubled; mid-sized cities (500,000 to 1,000,000 residents) have held the same relative proportion of urban residents while smaller cities have declined; and insularity is a key constraint on many islands.
9. Since the mid-20th century, Cuba has taken the most divergent path to urban and national development in the past half-century with its variant form of socialist cities.
10. Natural disasters in the Caribbean, Central America, and Mexico compound the challenges of urban poverty.

The European settlement of the western hemisphere imposed the most dramatic landscape modification in the history of the human race, while unleashing a tragic chapter of intercontinental slavery and the annihilation of millions of Native Americans. The human drama that unfolded over the ensuing five centuries built upon and significantly transformed preexisting patterns and processes of urbanization throughout the region (fig. 3.1).

The Mexican urban system was forged in large measure by the Aztec pattern of urbanization, which was subjugated militarily by the Spanish so the colonizers' dual mission of proselytizing and mining could proceed. Mexico, both in the 15th and 21st centuries, became the economic and urban anchor to mainland production. Mexico's pre-Columbian mining and agricultural system allowed this nation, in both its colonial and independent phases, to enter the Industrial Revolution before the rest of the region. The urban geographies of Mexico City and Monterrey, explored later in this chapter, highlight the relationship between these resource endowments and industrial-led urbanization.

Meanwhile, the urban corridors of Central America and the Caribbean followed an agricultural-driven model of colonial and postcolonial growth. Caribbean urbanization developed slowly and was confined in large measure by limited flatlands in the Caribbean and tied to the fortunes of monocultural exports such as sugar, bananas, and spices. The urban geographies of St. Thomas, U.S. Virgin Islands, and Havana, Cuba, highlight this region's external dependency on trade,

sugar, and slavery that, in turn, shaped the process of urbanization.

HISTORICAL GEOGRAPHY OF MIDDLE AMERICAN AND CARIBBEAN URBAN DEVELOPMENT

Mexico

The historical antecedents of the urban system in Mexico date back to the precolonial era when the cities were first established. Many pre-Columbian cities remain to this day, and Tenochtitlan (now Mexico City) is the most renowned. At the time of the Spanish conquest in the 16th century, Tenochtitlan, located in the Valley of Mexico, had a population of approximately 300,000. It was the most important urban settlement of the Aztec Empire (also known as Culhua-Mexica) and the largest pre-Columbian settlement in the Western Hemisphere. Theirs was an empire that stretched across a large part of Mesoamerica. Important settlements co-existed, including the Mayan population in the Yucatan Peninsula; the Tarascos in the present-day states of Michoacán, Jalisco, Colima, and Guanajuato; and the Zapotecas and Mixes in the state of Oaxaca.

Two particular aspects of these patterns of population settlement stand out. First, these large population agglomerations adopted a "city-state" model of organization, whereby a large commercial and religious settlement dominated rural communities and other smaller political-religious localities within their hinterland. Second, the major urban cultures were particularly prominent in the central region of Mexico. Estimates place this dispersed population in 1521, the time of contact, at 2.5 million. This region played a historically significant role in the formation of the subsequent urban agglomerations of the Spanish. Tenochtitlan, refounded as Mexico City, became the capital of the Spanish Empire (Nueva España).

During the 300 years of the colonial era, urban development expanded northwards and toward the Gulf of Mexico. The Spanish developed new cities to carry out administrative and political functions and to serve as economic centers to facilitate commerce with Spain. Developments to the north exploited natural resources, especially minerals, while expansion east of Mexico City connected colonial Mexican exports with the Spanish port of Seville. Colonial Mexico inherited and upheld the central region (the highlands) as its historic and geographic core. In many regions, colonial cities coincided almost exactly with pre-existing indigenous settlements. In other regions, especially in the central part of the country and the lowlands of Yucatan where Mayan groups had developed, old indigenous towns co-existed with the new Spanish settlements.

Mining and agricultural centers constituted the first phase in the colonization of the northern region of the country. Spanish mining towns were founded close to important silver mines, whose indigenous settlements included Taxco, Pachuca, Zacatecas, and Guanajuato. These centers and company towns functioned as enclave economies. Bajio, in western central Mexico, was (re)constructed during the colonial period as a key base of the agriculture and livestock sector. Abundant natural resources in this region—its fertile plains supported food and fiber for the colonial government—were key factors in its colonization and in the establishment of conditions favorable to future urban growth.

It was not until the second half of the 19th century, following Mexico's independence in 1821 and during the presidency of Porfirio Díaz that new important regional centers emerged. During this period, moderate regional growth was stimulated through foreign investment and the development of railways and highways. Until the 1910 Mexican Revolution, foreign investment was concentrated in railways (33%) and mining (24%). Port development linked the railway network to maritime trade. Together, these technological and commercial links led to a proliferation of mining centers in northern Mexico, which, in turn, triggered regional markets and urban growth.

Railroad expansion played a crucial role in stimulating urban growth in various cities in the central and northern regions of the country. Mérida (the hub of commercial sisal plantations) and Guadalajara, Veracruz, Monterrey, and San Luís Potosí (all with direct transport links to Tampico on the Gulf of Mexico) grew rapidly. Old mining towns in the north gave way to new cities. Monterrey, at one time known as the "Pittsburgh of Mexico," became a major center of heavy industry (e.g., steel, foundries, manufacturing). Veracruz, a principal transport node, handled nearly all import and export shipping cargo.

The economic, geographic, and political changes that took place during the Porfirio Díaz presidencies (1876–1880 and 1884–1911) had long-term implications for Mexico's urban system. A communication network facilitated interaction between the central and northern regions of the country. High dependency on exports to the United States largely inhibited the formation of a balanced urban system, and those cities that were the largest agglomerations at the start of the 20th century retained their economic and political dominance in subsequent years.

Particular national and international events slowed urban growth in the first decades of the 20th century. The revolutionary movement within Mexico of 1910–1921 and the global economic depression of the 1930s curtailed exports and urban growth. Nevertheless, between 1900 and 1940, the urban population grew at a rate far greater than the total population, increasing from 1.4 to 3.9 million inhabitants. Although the number of cities increased from 33 in 1900 to 55 in 1940, most urban growth was concentrated in the larger cities of Mexico. In 1900, there were only two cities with populations greater than 100,000. Yet, these made up one-third of urban Mexico and represented 10.5% of the national population. By 1940, there were six cities of this size, accounting for 12% of the urban population and 20% of the total population. By this time, the population of Mexico City had reached 1.5 million, and its primacy index had increased; it was nearly seven times larger than the second largest city, Guadalajara.

In the 1950s, the population of Mexico City reached 3 million, whereas Guadalajara and Monterrey, the two next largest cities, had populations of a little over 250,000. Industrialization policies received wide support, and manufacturing activity, financed by both the private and public sectors, took advantage of economies of scale in Mexico City. This led to further demographic concentration in Mexico City.

At the beginning of the 1970s, a shift towards metropolitan expansion emerged as a new form of urban growth in Mexico City and some secondary cities. There was a massive rural–urban migration flow, with approximately 3 million migrants moving to Mexico City in the 1960s. This gave the capital an

annual growth rate of 5.7, which was a historic high at that time. Eleven secondary cities experienced notable metropolitan expansion: Monterrey, Guadalajara, Puebla, Orizaba-Córdoba, Veracruz, Chihuahua, Tampico, León, Torreón, Mérida, and San Luís Potosí. Of these, the first three had populations of over half a million. Three border cities—Tijuana and Mexicali in Baja California, and Ciudad Juárez in Chihuahua—expanded significantly and strengthened their relationships with twin cities across the border (tab. 3.1).

Table 3.1 The U.S.–Mexican Border Twin Cities Phenomenon: Population and Employment Data

City	*Population*	*Formal Employment*
El Paso, Texas	732,613	255,700
Ciudad Juárez, Chihuahua	1,420,262	331,623
Laredo, Texas	219,760	75,700
Nuevo Laredo, Tamaulipas	363,919	118,561
McAllen, Texas	642,776	179,200
Reynosa, Tamaulipas	504,748	175,495
Brownsville, Texas	370,268	114,700
Matamoros, Tamaulipas	486,941	167,362

Source: Federal Reserve Bank of Dallas, *Crossroads*, Issue 2, 2005. Accessed November 11, 2007 at http://www.dallasfed.org/research/crossroads/2005/cross0502.html, Table 1.

Mexico's border cities grew in importance when the demand for contractual migrant labor during World War II cast these cities as "staging areas" for border crossings of laborers into the United States. Between the 1940s and the early 1960s, the Bracero workers' program (named for the day-laborers who were contracted) brought specified numbers of Mexican laborers into U.S. corporate farm operations. When the program was discontinued in the 1960s, concern grew for the service industries that had developed on the Mexican side of the "twin cities" and for potential unemployment problems. In response, *maquiladora* factories were established as part of the Border Industrialization Program. This arrangement allowed American companies to import manufacturing parts to Mexican cities, have them assembled in maquiladora (e.g., piecemeal assembly) plants, and reimport the finished products into the United States while paying only value-added tax. However, with the creation of the North American Free Trade Act in 1992, the relative locational advantage of being close to the United States dissipated, as trade barriers excluding the rest of Mexico fell for trade with the United States and Canada. Today, the border cities identified in Table 3.1 retain high levels of manufacturing and service workers and, except for the Mexican twin city of Reynosa-Tamaupilas, have even larger labor markets than their U.S. counterparts. Accordingly, it is more appropriate to think of these twin cities as a single conurbation, working in similar manufacturing and service sectors, rather than as discrete cities divided by an international boundary.

Between 1950 and 1970, Mexico's urban population grew at a rate of almost 5% per annum, while the rural population (in settlements of fewer than 2,500 inhabitants) grew only at an average rate of 1.5% per year; 8 out of every 10 new inhabitants were urban dwellers. From 1950 to 1970, most demographic factors signaled improvements in the quality of life. Life expectancy increased from 51.9 to 63.1 years, and infant mortality fell from 116 deaths per 1,000 live births to 73. Despite this progress, there were significant gaps between urban and rural areas. Millions left the countryside in search of work in cities, but there were very few

destinations for gainful employment. Almost half of the rural migrants ended up in Mexico City, and one-fifth went to Guadalajara and Monterrey. Although Mexico became predominantly urban, it revealed substantial disparities between urban and rural living conditions, as well as regional inequality.

By the start of the 1980s, a process of urban growth deconcentration was under way, as intermediate cities in various regions began to experience greater growth rates than larger cities. This process took advantage of the opportunities offered by medium-sized cities located close to large cities. Such amenities included lower costs of land and housing, newer infrastructure, more parks and open space, and less congestion.

By 1970, Mexico's urban, industrial, and demographic transitions were well under way, as overall growth rates had fallen. By 2006, 70% of Mexico's 103 million people lived in cities. Although a persistent trend nationwide is the concentration of population in an increasing number of large cities, it is important to note that growth rates have dropped for cities of all sizes. Since the 1970s, growth rates of cities in excess of 1 million residents have been consistent with overall national population growth rates. However, wide social differences remain; these exist not only between central and peripheral regions of the country, but also between economic sectors and between different ethnic groups. Southern, more indigenously populated areas of Mexico around the states of Chiapas and Oaxaca, for example, remain some of the poorest regions of the country. They are also a principal source of out-migration to the United States because job opportunities are so limited there.

The new millennium signals emerging trends in Mexico's urban system. Currently, urban growth is occurring not only in intermediate cities located close to large cities, but also in independent cities in remote regions far from the large agglomerations. That manufacturing in Mexico City has decreased in recent years due to Asian competitors is likely related to this phenomenon.

From a socioeconomic perspective, it is interesting to evaluate national and sub-national levels of human development in an international context. In 2000, the United Nations Human Development Index (HDI) ranked Mexico 54th out of 173 countries. This ranking revealed an HDI approaching a medium-high to high level. Within Latin America and the Caribbean, Mexico ranks seventh, below Argentina, Chile, Costa Rica, Uruguay, the Bahamas, and Cuba. There are significant geographic differences in the HDI at a sub-national level. The Federal District (containing Mexico City) and Nuevo León (which contains the city of Monterrey) carry a significant human development advantage over other states such as rural and indigenous Chiapas and Oaxaca in the south. The Federal District has an HDI comparable to that of European countries such as Portugal and Greece, whereas Oaxaca and Chiapas have HDIs similar to those found in the Palestinian Territories, Uzbekistan, and Algeria. Key differences are even more pronounced at the municipal level. In Mexico City for example, the wealthy residential area of Delegación Benito Juárez registers an HDI comparable to the national index of Germany. At the other extreme are municipalities equal to levels found in African countries, as is the case in various municipalities of the states of Guerrero and Oaxaca.

Strongly associated with the HDI is the Marginalization Index. This demonstrates the exclusion of certain social groups from the development process and its benefits. Five

ing not only in inter-
ose to large cities, but
ies in remote regions
gglomerations. That
:o City has decreased
Asian competitors is
nomenon.
nic perspective, it is
national and sub-
n development in an
n 2000, the United
pment Index (HDI)
of 173 countries. This
HDI approaching a
level. Within Latin
bean, Mexico ranks
a, Chile, Costa Rica,
nd Cuba. There are
ere s in the HDI at
Federal District (con-
Nuevo León (which
errey) carry a signifi-
advantage over other
indigenous Chiapas
The Federal District
to that of European
and Greece, whereas
ve HDIs similar to
estinian Territories,
Key differences are
the municipal level.
mple, the wealthy
ación Benito Juárez
able to the national
other extreme are
els found in African
various municipali-
o and Oaxaca.
h the HDI is the
This demonstrates
ial ups from the
its benefits. Five

variables make up the index: access to health care, access to education, access to housing and basic services, perception of adequate income, and gender inequality. It is calculated at the level of the smallest urban census units, the Basic Urban Geostatistical Area (BGAs). Results show that 31.7% of these units have a "very high" level of marginalization, and 20.6% reveal a "high" level of marginalization. Together, they account for 52% of all BGAs. Put another way, 29.1 million urban dwellers—nearly one-third of the country—live in conditions of "high" or "very high" poverty.

BGAs with the highest urban marginalization concentrate in small cities with populations under 100,000 inhabitants. Yet, given the higher total populations found in larger cities, these urban centers absorb greater total numbers of inhabitants living in conditions of high or very high marginalization. Thus, marginalization afflicts almost half the national urban population (48%) that resides in cities with populations exceeding 1 million.

Mexican urbanization and industrialization have created environmental problems, particularly air pollution. Monitoring data show that the most important pollutants are ozone (O_3) and particulates smaller than 10 micrometers (PM_{10}). In Mexico City, ozone is the main problem. In 2004, levels were high for 170 days, a considerable decrease from previous years. Ozone levels in Guadalajara have also decreased over recent years, with only 47 days passing normal levels in 2004. Most other cities maintain rates of less than 40 days per year.

There has been an overall improvement in air quality in the main cities because of the use of low-lead and -sulfur gasoline and the imposition of strict limits on emissions for new vehicles. In the case of PM_{10}, rates in Mexico City dropped from 135 days above the normal level in 1996, to just 5 days in 2004. Accordingly, the capital is no longer the zone with highest rates of contamination, as Toluca and Monterrey have shown increased levels of pollution since 2000. The overall trend has been towards reduced levels of PM_{10}, carbon monoxide (CO) and sulfur dioxide (SO_2). Nevertheless, more investment is required to reduce air pollution. Public sector spending on pollution reduction in 2002 totaled 91.6 million pesos (US $8,193,000), a mere 0.3% of total environmental expenditures. These contemporary problems are a manifestation of Mexico's complex history of conquest, settlement, and urbanization.

Central America

If the conquest of the Aztec population in the Valley of Mexico was facilitated by a large city whose leadership was quickly subjugated by Spanish rule, the smaller, more dispersed towns of the lands south of Mexico delayed conquest. The growth of significant cities in Central America dates to the colonial era when Spain was responsible for the politico-administrative division of the region. The Captaincy General of New Spain (Spanish Empire) first used the city of Antigua, Guatemala, as its base, but after a series of earthquakes devastated Antigua, it moved the capital to present-day Guatemala City. Each captaincy (colonial jurisdiction) had a provincial capital: San Salvador in El Salvador, Comayagua in Honduras, Granada in Nicaragua, Cártago in Costa Rica, and Panama La Vieja in Panama. Shortly after 1821, the year in which independence from Spain was achieved, most of these provincial capitals became national capitals. Guatemala, initially part of the post-independence Mexican Empire, seceded from it in 1823

when the Federal Republic of Central America was established. At that time, Guatemala City played dual roles as both state capital and federal capital.

The urbanization process in Central America can largely be divided into two main phases. The first period, from 1821 to 1930, includes the first century of independence from Spain and the foundation and subsequent peak of agricultural export economies. The second period dates from the 1930s until the present day and marks a transition in both the economic model in the region and a phase of accelerated urbanization.

The era of independence shifted hegemonic control of the region from Spain to Great Britain and opened new external markets for the region's agricultural produce, which significantly influenced the nature of urbanization in the region. The early decades of independence marked a transition for some countries from the export of various agricultural products to the nearly exclusive export of coffee. In 1835, San José became the capital of Costa Rica, first because of tobacco production and later because of coffee, as it became home to the country's coffee oligarchy. The colonial export base of Guatemala shifted from grain production and pig farming to coffee in the second half of the 19th century. By the end of the 19th century, practically all countries in the region depended largely on income from coffee exports. The coffee boom consolidated the Central American capitals. This was apparent in Guatemala City (Guatemala), San Salvador (El Salvador), and San José (Costa Rica), where national governments expanded to fill this new political and economic role, and city populations and physical expanse grew accordingly.

Meanwhile, North American investment in banana plantations, first in Costa Rica, then in Guatemala, and finally in Honduras, accelerated urbanization in these regions. Together with the coffee economy, it actively produced social differentiation through the need for agricultural, transport, and dock laborers in cities, ports, and hinterlands, and for salaried employees in the emerging urban centers of Puerto Barrios (Guatemala), Bluefields (Nicaragua), Limón (Costa Rica), and Colón (Panama). International capital co-opted and monopolized the communication, transportation, and commercial infrastructures of much of the region and its cities. For example, between 1875 and 1885, the banana enclave appropriated more than 300 miles (480 km) of railroad in Guatemala; this infrastructure had been built with national funds. Multinational companies also controlled the docks and port installations of Puerto Barrios in Guatemala and San José in Costa Rica. Foreign railroad tycoons, such as the American Minor Keith, wielded considerable economic and political influence in expanding the railroads and developing international trade throughout Central America.

Panama City developed in a markedly distinct way as a capital city, as it traded its links with Spain for the geopolitical project of Gran Colombia (Great Colombia). Its subsequent growth was based on the development of inter-ocean communication, initially via railroad and later via the canal projects driven first by France and later by the United States (figs. 3.3, 3.4).

Yet the Central American urbanization process was most prolific around the middle of the 20th century as rural dwellers came to cities in search of work and improved quality of life in terms of education, health care, personal security, housing, transportation, and communications. In some cases, their expectations have been met; in other cases, they have encountered disappointment.

Today, Central America is nearly 70% urban (tab. 3.2), ranging from approximately

Figure 3.2 The Panama Canal is a great engineering feat, which allows deep-draft ships to transport merchandise of every type between the Atlantic and Pacific Oceans. It is also one of the main tourist attractions of the city. (Photo by Jorge González)

45% in Honduras and Guatemala to 59% and 66% in Costa Rica and Panama, respectively. National poverty rates seem to mirror urbanization rates. Poverty is lowest in Costa Rica (20%) and Panama (35%) and highest in Honduras (75%) and Guatemala (65%). Concomitantly, Guatemala has the highest indigenous population of any country in the region, standing at approximately 5 million, or 80% of the total indigenous population of Central America (fig. 3.4). Although levels of urbanization in Central American cities have increased over the past 30 years, they still lag behind the Latin American average (tab. 3.2).

The largest and most important urban centers in Central America essentially correspond to the capital cities of the seven countries, together with other cities important for their economic integration and population levels, such as Antigua in Guatemala or León in Nicaragua. Next are a series of medium-sized and small cities, such as Cártago and Puntarenas in Costa Rica, Acajutla and New San Salvador in El Salvador, Chichicastenango and Esquipulas in Guatemala, San Pedro Sula and Copán in Honduras, Chinandega in Nicaragua, and Portobelo in Panama.

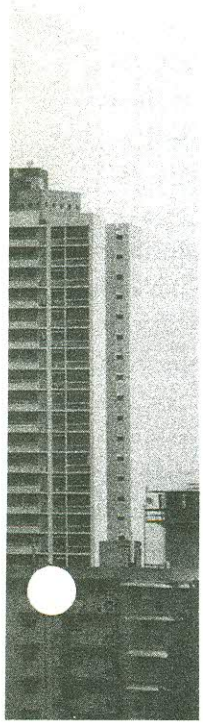
City and population distribution relates to Central America's physical geography, which criss-crosses the region with extensive mountain ranges and volcanoes, as well as innumerable rivers, waterfalls, and lakes. Central

Figure 3.3 Modern Panama City, with its many ultra-modern skyscrapers, is a vision of economic growth. (Photo by Jorge González)

America is also influenced by geological faults and continental plates. Together with the confluence of weather phenomena, these environmental conditions combine to make most of the human settlements of the region vulnerable to natural disasters, including earthquakes, volcanic eruptions, landslides, floods, and hurricanes. Unfortunately, most countries lack the resources to prevent, prepare for, or manage these hazards. Yet it was precisely the availability of water and land resources that induced the growth of settlements on volcanic soil and flood plains, and which in turn allowed the development of agriculture as the basic economic activity.

Except for El Salvador, which has only a Pacific coastline, and Belize, which borders the Caribbean (Atlantic section), the remaining Central American countries all have coastlines on both the Pacific and Atlantic Oceans. This allowed seaports to be established which were of vital economic importance to the individual countries and the region as a whole. Construction of the Pan-American Highway, dating back to the 1930s, has also promoted urban development throughout Central America. The Pan-American Highway winds along the western edge of Central America and connects all the capital cities. Serving as a vertical axis, the highway has allowed roads linking yet other urban centers and smaller settlements to be developed.

Urbanization has played a crucial role in providing the necessary infrastructure to allow



vision of

tion), the remain-
ries all have coast-
l Atlantic Oceans.
established which
nportance to the
the region as a
ıe Pan-American
ıe 1930s, has also
ment throughout
ımerican Highway
edge of Central
the capital cities.
the highway has
ther urban centers
ɔe eloped.
l a crucial role in
astructure to allow

Table 3.2 Levels of Urbanization in Central America

1970–2000

Country	**Level of Urbanization (%) 1970*	*1980*	*2000*
Panama	47.6	50.4	65.8
Costa Rica	38.8	43.1	59.0
Belize	51.0	49.4	47.7
El Salvador	39.4	44.1	58.4
Nicaragua	47.0	50.3	57.2
Guatemala	35.5	37.4	45.1
Honduras	28.9	34.9	44.4
*Total:			
Latin America & Caribbean	57.2	65.1	75.4
Central America	53.8	60.2	68.8
Caribbean	45.4	52.3	62.1

Note: Countries are ordered by level of urbanization in 2000.
*Urban population as a percentage of the total population.
Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: *The 2004 Revision and World Urbanization Prospects: The 2005 Revision*, http://esa.un.org/unup, Monday, December 03, 2007; 12:58:42 PM.

ease of movement between a range of traditional tourist and newer eco-tourist sites. The rise of adventure tourism in recent years generates multipliers in the economies of local communities, especially those of indigenous peoples who are able to organize the control and development of tourist activity. Tourism in all its variations attracts both regional and international tourists, and thus provides an important source of income for the region.

Despite the economic, cultural, and political development that has occurred within and around many cities, the urban panorama in Central America is not promising. Priority is often given to property development serving the high-earning population, including gated residential communities, business and commercial centers, corporate offices, and franchises. Economic liberalization at the global scale has led to pronounced social polarization and economic insecurity in cities throughout Central America. Child and adolescent labor is rampant as families press their children into petty commerce, service provision, and begging. Regardless, their contributions to family income are often not enough for the family to subsist. Many families face the difficult decision of pushing one or more family members to migrate to larger cities or even to the United States. It is common among Central American women, particularly from El Salvador, to make the long trip to Europe, where they characteristically labor in domestic or care-giving work in an effort to support their families economically.

In recent decades, the widespread poverty and exclusion that affects large sections of the population in Central American cities has led to a proliferation of gangs. Gang members are typically young and tend to live in peripheral zones of large cities such as Guatemala City (Guatemala), Tegucigalpa (Honduras), and San Salvador (El Salvador). In 2005, gangs were allegedly responsible for 5,200 deaths in Guatemala, 2,349 in Honduras, and more

Figure 3.4 Most Guatemalan indigenous women still wear a traditional blouse called the *huipil*. This ornate garment is woven on traditional looms and then hand-embroidered. Villages and towns have their own unique design, which is particularly useful at periodic and regional markets, so both vendors and buyers can readily identify the community of the seller, which in turn means that certain goods and produce might be available there. (Photo by Matthew Taylor)

than 3,000 in El Salvador. The principal gangs are the "Mara Salvatrucha" and the "Mara 18." They define themselves by extensive tattoos on the face and body. They are linked with criminal acts such as the trafficking of drugs and people, assassinations, rape, and assaults. It is estimated that more than 100,000 young people have joined these gangs—40,000 in Honduras, 60,000 in Guatemala, and 10,000 in El Salvador (box 3.1).

The influence of the *maras* has spread beyond Central America into Mexico, Spain, and the United States. The social and economic instability in Central America, evidenced in scarce educational and job opportunities, and family disintegration, leaves many young people to believe they have only two viable options: attempt to migrate to the United States or join a gang.

The Caribbean

In 1502 Nicolás de Ovando claimed what may well be the first permanent European settlement in the Americas, when he and 2,500 Spanish colonists settled in eastern Hispaniola. The fierce

Box 3.1 Gangs: A Violent Urban Social Development

The rise of gangs throughout the cities of Central America is associated with many factors. Some hold that gangs reflect the struggle of some young people to search for an identity. Others argue they are the outcome of widespread and persistent poverty and political disenfranchisement. Most concur that, in seeking to improve the quality of their lives and acquire what is otherwise unattainable, some youths resort to violence. Gangs are associated with such violent/criminal activities as organized crime, arms trafficking, forgery, gangsterism, rape, kidnapping, extortion, and the sale and consumption of drugs. Some gangs demand "taxes" from bus drivers in order to pass through their territory, whereas others extort protection money from small business owners who operate on their turf.

In Central America, the most notorious and violent type of gangs are known as *maras*, the most infamous of which is the *Mara Salvatrucha* or MS 13. It is made up primarily of young men between the ages of 12 and 25. Although the *Mara Salvatrucha* is dominant in El Salvador, where it represents approximately 70% of all youth gangs, it has spread throughout the Americas from Canada to Colombia. It has taken particular hold in impoverished border regions of Mexico and cities of Central America where alternative sources of fulfillment are conspicuously absent. These gangs are particularly distinctive in their highly visible use of tattoos, with many gang members having identifying gang tattoos on their faces, necks, chests, and hands.

The word *mara* has become the generic term for youth gangs in Central America. *Mara Salvatrucha* was founded on the streets of Los Angeles by immigrant Salvadoran youths fleeing the Salvadoran civil war. It is alleged that *Mara Salvatrucha* was formed in response to the discrimination and victimization Salvadoran youths experienced at the hands of ethnic gangs proliferating in Los Angeles in the 1970s. Later, other Central American immigrants were integrated into the gang. The word *Salvatrucha* refers to one who is a "shrewd Salvadoran". It is widely thought that the current proliferation of violent gangs in Central and parts of South America is related to large-scale repatriations from the United States because many gang members find fertile conditions in the poverty that is so prevalent in the cities of their home region. Gangs have come to represent (at least in the popular and political imagination) one of the most serious threats to security and democracy in the region. The formal political power vacuum created by many Central American governments enhances the power of gangs. In many cities, virulent attacks have become an issue of national security. The spread of the *maras* has undermined the authority of the police and weakened the ability of governments to protect communities.

Caribs thwarted European settlement in the eastern Caribbean until the 17th century and relented only in the 18th century. During this time, the Spanish focused their energies on the Greater Antilles. Accordingly, Spanish administrative control fanned out from Santo Domingo (the general term for eastern Hispaniola) into Jamaica (1509) and Trinidad (1510). By 1511, Florida marked the eastern expansion of Spanish territories. Caribbean ports were scoped for harbor protection, fresh water, and provisions, and for nexuses between what little mineral and agricultural wealth might be extracted from port hinterlands.

Hernán Cortez's conquest of Mexico in 1519, with its gold and silver, created some disinterest in the Caribbean. Spain would gradually relinquish its control over selected parts of the Antilles to the English, Dutch, and French, and sugar and tobacco would come to replace the pursuit of precious minerals. Accordingly, that required an elaborate trans-Atlantic slave trade. Greed, inhumanity, and arduous demands placed on plantation slave workers between 1518 and 1870 drove the trans-Atlantic slave trade. Of the nearly 10 million slaves brought to the Americas, the Caribbean would absorb nearly half. The majority arrived during the 18th century to toil in the sugar economies of Jamaica, Barbados, and the Leeward Islands. Antislavery societies from Britain and France enlisted rationalist arguments from the Enlightenment to challenge slavery, but the Spanish colonies were keen on expanding sugar production. Indeed, cycles of slave importation, sugar production and processing, and the exporting of semi-processed (brown sugar and molasses) sugar and refined sugar established a vast network of plantations and small ports throughout the Caribbean. This historical economic geography set the stage for the distribution of cities, towns, and villages in the region.

It took nearly two centuries for European powers to establish maritime control over the dispersed ports and islands that covered more than 1 million square miles (2.7 million sq km) of the Caribbean basin. Even that control was tenuous at best. For instance, the ports of Barbados and Nelson's Dockyard in Antigua attracted pirates who preyed on cargo ships traveling from Spain, England, and Holland. Bluebeard, Bartholomew Roberts, Stede Bonet, and Henry Morgan are the most notorious buccaneers and privateers who plied these waters in hope of snatching cargo shuttled between Europe and the Americas. In response, Caribbean ports developed fortresses to protect their fleets and provide succor to mariners and friendly merchants. Until the Treaty of Madrid in 1670—when Spain and England finally agreed on territorial claims—many privateers defended the interests of the European colonists. Henry Morgan defended Jamaica for the British and invaded Puerto Principe (now Camaguey), Cuba, and Puerto Bello, Panama. Caribbean colonial ports became key centers for island control, inter-island transfer points, and European enclaves of colonial resources (fig. 3.5).

Four striking patterns highlight the contemporary urbanization and settlement patterns of the Caribbean. First, no Caribbean island is without its primate city. And with the exception of Havana (Cuba) and San Juan (Puerto Rico), most primate cities are located on the leeward coast, immune from the brisk trade winds (*vientos alisios*), and are often nestled along a deep and protected bay. These historic ports were well suited for anchorage or for loading sugar and unloading cargo (e.g., rum, spices). Colonists built gun sites and forts on commanding hilltops and ridges to protect the locals from marauding pirates and rival European colonists. Second, Caribbean urbanization in the past half-

Figure 3.5 Sp
from Robert C.
ed. (Englewoo

century shows that
to 1,000,000 reside
relative proportio
whereas those with
residents have declin
with 1 to 5 million
doubled (fig. 3.6).
larly striking given th
lying land along the
and river valleys etc
scapes that can acco

Fourth, beyond th
Hispaniola, Puerto Ri
key constraint. With
most of the low-lying
1,500 feet in maxim
small and therefore
nental urbanization
America. The highe
islands include, but a
(213 ft), St. Martine

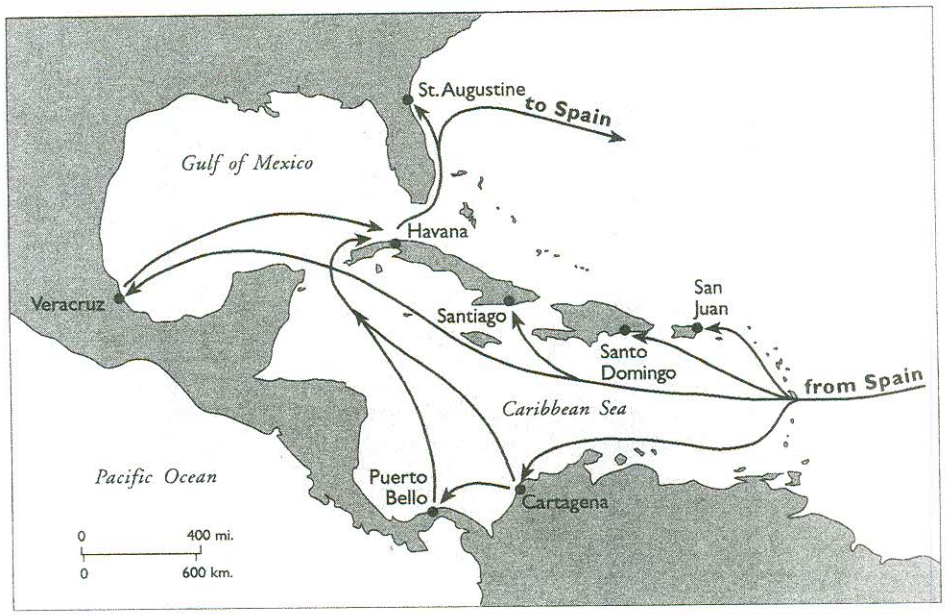


Figure 3.5 Spanish Ports and Convoy Routes in the Colonial Era. *Source:* Adapted from Robert C. West and John P. Augelli, *Middle America: Its Lands and Peoples*, 2d ed. (Englewood Cliffs, NJ: Prentice Hall, 1976), 64.

century shows that mid-sized cities (500,000 to 1,000,000 residents) have held the same relative proportion of urban residents, whereas those with fewer than half a million residents have declined (fig. 3.6). Third, places with 1 to 5 million residents have more than doubled (fig. 3.6). These trends are particularly striking given the limited amount of low-lying land along the bay fronts, coastal plains, and river valleys etched in the islands' landscapes that can accommodate city growth.

Fourth, beyond the Greater Antilles (Cuba, Hispaniola, Puerto Rico, Jamaica), insularity is a key constraint. With the exception of Barbados, most of the low-lying islands (roughly less than 1,500 feet in maximum elevation) are rather small and therefore pale to the scale of continental urbanization found elsewhere in Latin America. The highest points on these rugged islands include, but are not limited to, Anguilla (213 ft), St. Martine (1,360 ft), St. Bartélemy (992 ft), Barbuda (992 ft), Antigua (1,330 ft), Désirade (912 ft), Marie Galante (672 ft), and Barbados (1,100 ft). Mountainous islands are more prevalent as St. Kitts (4,314 ft), Nevis (3,596 ft), Montserrat (3,002 ft), Guadeloupe (4,869 ft), Dominica (4,747 ft), St. Lucia (3,154 ft), St. Vincent (4,048 ft), and Grenada (2,749 ft) illustrate.

Spanish and English settlement patterns provide historical backdrops to contemporary urbanization. Spanish settlements needed to defend the windward approaches into the Caribbean and fortress towns. These locations marked early landfalls for those ships riding the trade winds. San Felipe del Morro castle in San Juan, Puerto Rico, characterizes this defensive posture, as do El Morro castle in Havana, Cuba, and the fortress guarding the entrance to Santiago de Cuba. In turn, these key ports relied on nearby forests for shipbuilding and repair. Spanish towns in the Caribbean followed the

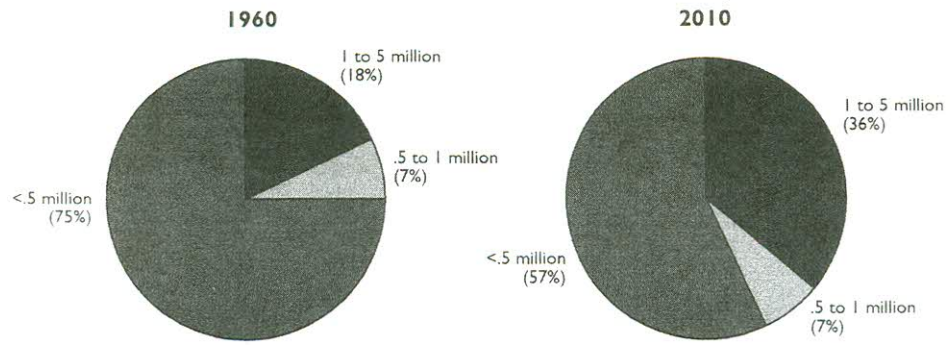


Figure 3.6 Caribbean Urbanization by City Sizes, 1960 and 2010. *Source:* Data from United Nations, *World Population Prospects: The 2004 Revision and World Urbanization Prospects, 2005 Revision* (2006, http://esa.un.org/unup), Sunday, February 18, 2007.

same grid-style settlement plan dictated by the Law of the Indies as towns in Mexico and Central America. Towns were centered upon the main plaza, usually anchored by a government building (*cabildo*) and church at each end. Block size and street width were predetermined; locally unwanted land uses such as garbage dumps, slaughterhouses, and cemeteries were sited at the periphery of the new towns. Early Spanish Caribbean ports depended mostly on adjacent hinterlands for food crops and stock-raising; salted beef was of particular appeal to mariners and town-dwellers. Because the function of these settlements was in large measure to facilitate extraction of mineral wealth from Mexico and other parts of the mainland, little urban growth took place in Caribbean ports of the 16th century.

Non-Spanish settlements were less orthodox and more haphazard in form. In Britain, for instance, royal favor was doled out to loyalists by the Proprietary System. Caribbean settlers from England had learned from Atlantic seaboard settlements in North America. Accordingly, their priorities entailed clearing land for wood and agriculture, constructing fortresses, and coming to terms with indigenous peoples. Although the British originally planted tobacco and cotton on their settlements, they would gradually turn to sugar monoculture. In both British and Spanish settlements, little colonial architecture other than military structures, a few churches, and fortified (brick and stone) sugar plantations have survived until today because of fire, tropical storms, and rebuilding. Subsequent discussion of Charlotte Amalie, U.S. Virgin Islands, and Havana, Cuba, will situate these historical settlement patterns.

REPRESENTATIVE CITIES

Mexico City: Ancient Aztec Capital, Contemporary Megacity

Mexico's Distrito Federal or capital city (Mexico City) was founded in the 14th century by the Aztecs. Called Tenochtitlan, it soon became the center of the largest empire in pre-Columbian Mesoamerica. As the current capital of the United States of Mexico, it is also the country's largest urban center and serves as the nation's economic, social, educational, and political hub. With a population of over 19 mil-

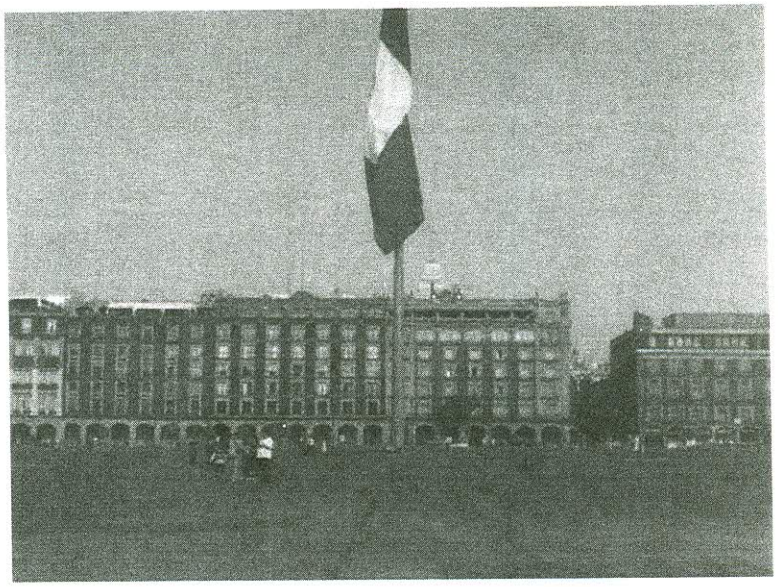


Figure 3.7 The Zócalo (Main Square) in Mexico City is surrounded by colonial buildings, most notably the Metropolitan Cathedral and the headquarters of the Federal and Capital Governments. (Photo by Irma Escamilla)

lion in 2005, it is the largest city in Latin America and among the largest cities in the world. Its growth in the 20th century burgeoned from 3.4 million in 1950 to about 9 million in 1970, and just shy of 15 million by 1990.

In local parlance, "Mexico City" refers to the entire metropolitan area, which not only covers the Federal District, but also includes parts of the states of Mexico and Hidalgo. At the beginning of the 21st century, its metropolitan area stretched over an area of more than 1,900 square miles (5,000 sq km), or four times the size of the state of Rhode Island, of which the Federal District accounted for nearly 30%. Mexico City is located in a closed drainage basin at an altitude of approximately 7,280 feet above sea level. It is surrounded by six mountain ranges. A plain extends from the east of the city, ending in the Sierra Nevada range with its two striking landmarks: Volcano Iztacíhuatl (17,323 ft) and Volcano Popocatépetl (17,887 ft). Toward the north of the city is the Sierra de Guadalupe, around which new urban areas have developed. Although Mexico City lies within the tropics, its altitude affords it a more temperate climate.

The Zócalo or main square—now officially called the Plaza de la Constitución—is the traditional center of the city (fig. 3.7). On the northern side of the square, close to the ancient site of the main Aztec temple, is the Metropolitan Cathedral. Spanish conquistadores frequently subjugated the Native American population by rebuilding churches atop indigenous temples. To the east is the Palacio de Gobierno (main government building); built on the ruins of the ancient Aztec emperor's palace, it is another symbolic replacement of political power. The colonial city extended in an orderly fashion for various blocks around this square, as prescribed by guidelines specified in the Law of the Indies. These orders, first issued in Spain in 1494, became the military engineer's template and mandated the location

Figure 3.8 The colonial architecture of the streets and houses of the *colonia* Pedregal de San Ángel has been preserved to this day. The area is one of the most exclusive zones in the south of the city, and is also an important tourist attraction. (Photo by Irma Escamilla)

of many colonial- and independence-era buildings in this zone. Many of the original structures and buildings of the traditional urban core—known as the centro histórico, or historical center—remain intact.

In general, Mexico City typifies the urbanization patterns and processes of Middle America and the Caribbean. Unlike the Anglo American model of urbanization that is prone to use the bulldozer, build limited-access highways, and embark on massive urban redevelopment projects to restructure the traditional downtown, the historic quarters of most cities in Middle America and the Caribbean have been safeguarded. The more "modern" aspects of 20th century urbanization developed just beyond the centro histórico. Also in contrast with the Anglo American and European models of urbanization, the national elite in Spanish America placed more social value on centrality. Therefore, many elite families and key government offices remained near the traditional colonial core until the 20th century when congestion, the automobile, and the need for new construction encouraged a slow process of middle- and upper-income suburbanization *a la norteamericana.* As a result, Mexico has dozens of World Heritage Sites that celebrate these colonial quarters. This leaves the urban poor in most Middle American and Caribbean cities to concentrate at the city edge where land values are cheaper, and self-help housing develops. In the case of Mexico City, the wealthy districts are concentrated in the west and various zones in the south, and in *colonias* such as Lomas de Chapultepec, Polanco, and Pedregal de San Ángel (fig. 3.8). These districts contrast sharply

Box

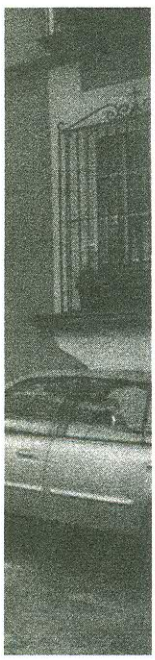
Mexico City has bee
range of technologi
ment in former cons
aid in identifying bi
the naked eye.

One analysis iden
a sample of 493 of
and western extrem
and 2000, and to th
and 2005. The study
further detected fra
among the settleme
tlements there are a
dispersion. Squatter
sion of traditional s
lated development).

The use of GIS a
appropriate both fo

with the poverty in th
illegal settlements in t
the Benito Juárez Inte
many communities la
such as Chalco and Ix

Given its metropol
a multinucleated plac
tor of the city has dev
cial and service struc
one time the preferre
middle classes, has l
upsurge of shinier su
that offer glitzier reta
consumption. As in o
suburban retailing c
role of the city center
trict. Examples incluc
north of the city, Peri



the colonia
of the
rtant tourist

ca placed more social
herefore, many elite
ment offices remained
nial core until the 20th
n, the automobile, and
ruction encouraged a
e- and upper-income
norteamericana. As a
ns of World Heritage
colonial quarters. This
or in most Middle
n cities to concentrate
nd values are cheaper,
evelops. In the case of
y districts are concen-
various zones in the
s such as Lomas de
ar Pedregal de San
stricts contrast sharply

Box 3.2 GIS and the Solution of Urban Problems

Mexico City has been expanding since the second half of the 20th century. Since 1995, a range of technological innovations has been used in determining irregular human settlement in former conservation lands in the southern part of the city. GIS and remote sensing aid in identifying biophysical, economic, and social features that cannot be observed with the naked eye.

One analysis identified 8,017 areas of squatter settlements (shantytowns) and examined a sample of 493 of these areas. It determined that shantytowns expanded into the eastern and western extremes of the conservation area at an annual rate of 13.2% between 1995 and 2000, and to the west-central and south-central zones at a rate of 4.6% between 2000 and 2005. The study found that expansion was taking place beyond settlement borders. It further detected fragmentation of the properties as well as differences in relief variation among the settlements under study because of road construction. In some traditional settlements there are areas of relatively continuous building, whereas in others there is notable dispersion. Squatter settlements account for as much as half the total area of all new expansion of traditional settlements (i.e., the total expansion including legally zoned and regulated development).

The use of GIS and remote sensing techniques may contribute to the design of policies appropriate both for these vulnerable populations and for ecologically fragile lands.

with the poverty in the northern zones and the illegal settlements in the eastern edges, beyond the Benito Juárez International Airport, where many communities lack basic services in zones such as Chalco and Ixtapaluca (box 3.2).

Given its metropolitan character, the city is a multinucleated place where every large sector of the city has developed its own commercial and service structure. The city center, at one time the preferred shopping district of the middle classes, has lost its prestige with the upsurge of shinier suburban shopping centers that offer glitzier retailing and new places for consumption. As in other corners of the world, suburban retailing challenges the traditional role of the city center as the main retailing district. Examples include the Plaza Satélite in the north of the city, Perisur in the South (fig. 3.9), and Sante Fé in the west. The market La Merced, which had been the main food market for the city since colonial times, was replaced in the 1980s with a modern market in the east of the city (fig. 3.10).

What factors account for the changing social and economic geography of Mexican cities? One reason stems from the import-substitution industrialization strategy implemented in the 1940s, which created conditions of stability and prosperity that made Mexico City the most important industrial center in the country. Today, it is responsible for 30% of national industrial production. In the second half of the 20th century, encouraged by the Border Industrialization Program of 1964, heavy industry began moving from the capital to border cities of the north. Just as many U.S.

Figure 3.9 Perisur is one of the large shopping malls in the south of Mexico City, where the presence of globally recognized prestigious stores provides stark evidence of globalization. (Photo by Irma Escamilla)

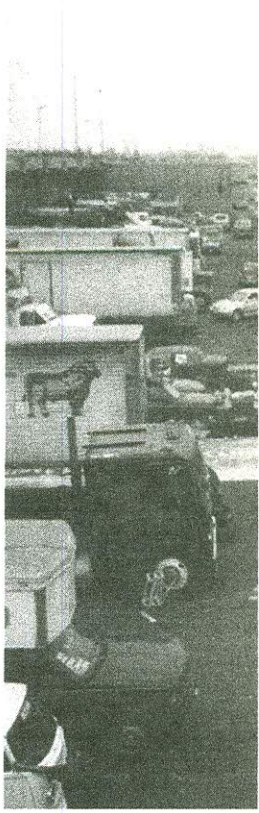


Figure 3.10 The Centra
point for retailers and w
and selling of goods as
pharmaceutical goods, s

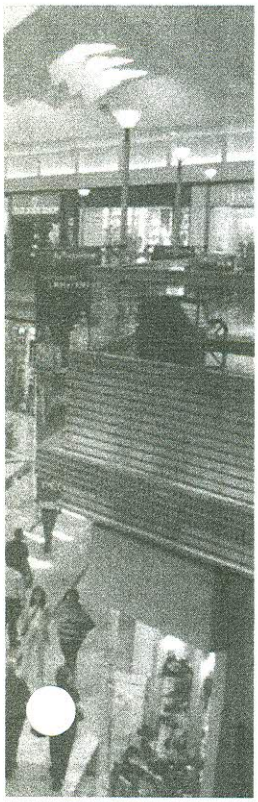
manufacturing towns lost jobs to lower-wage labor in maquiladoras, so too did Mexico City.

Today, the most important industries in Mexico City are chemicals, plastics, cement, and textiles; light industry is becoming increasingly important. Due to the good quality of life enjoyed by a large proportion of its inhabitants, and because it is the most important supply center of the country, Mexico City accounts for around 45% of the country's commercial activity. Perhaps more than any other economic activity, financial services are particularly concentrated here. In addition to the headquarters of banks, the country's stock exchange and central bank are located in Mexico City.

Likewise, Mexico City is the hub of the national transport system. Five main highways link the capital to the different regions of the country, as well as to Guatemala and the United States through the now 70-year-old Pan-American Highway. Benito Juárez International Airport receives both national and international flights, in a proportion of 75% and 25% of total flights, respectively. In addition, there is an extensive intracity transport network, including the metro system that is used by over 2 million people daily, and a range of different types of buses.

Mexico City has always been one of the most important cultural centers in Latin America. It boasts a number of major cultural

sites, and its cinema, film
sion industries rival tho
Palacio de Bellas Artes i
is an important opera a
the Cultural Cente
Autonomous University
hosts the National Libra
and various theatres. Th
Anthropology is consid
important of its kind, a
such as the Chapultepec
ment of Independence,
symbols (fig. 3.12). Me
of significant history,
striking contrasts (fig. 3



‹ico City, where the
of globalization.

ity is the hub of the
tem. Five main high-
› the different regions
as to Guatemala and
ugh the now 70-year-
ghway. Benito Juárez
receives both national
ts, in a proportion of
flights, respectively. In
tensive intracity trans-
ng the metro system
million people daily,
t types of buses.
ways been one of the
ıra' enters in Latin
nber of major cultural

Figure 3.10 The Central de Abasto in Mexico City is the city's main collection and distribution point for retailers and wholesalers, which means thousands of daily transactions in the buying and selling of goods as diverse as fruit and vegetables, cereals, seeds, cleaning products, pharmaceutical goods, sweets, and cigarettes. (Photo by Irma Escamilla)

sites, and its cinema, film, theatrical, and television industries rival those of Buenos Aires. The Palacio de Bellas Artes in the center of the city is an important opera and concert venue, and the Cultural Center of the National Autonomous University of Mexico in the south hosts the National Library, a large concert hall, and various theatres. The National Museum of Anthropology is considered one of the most important of its kind, and some monuments, such as the Chapultepec Castle and the Monument of Independence, are considered national symbols (fig. 3.12). Mexico City is a megacity of significant history, impressive scale, and striking contrasts (fig. 3.13).

Monterrey, Mexico: Mexico's "Second City"?

Monterrey is the capital of the state of Nuevo León and is situated approximately 125 miles (200 km) from the Texan border. It is the third largest city in Mexico, with a 2005 population of 3.6 million. Most Mexicans consider it the second most important city because of its crucial industrial and financial roles. Urbanization in Monterrey derives in large measure from its proximity to the U.S. border. Its relative location is also advantageous because it is located where the plains of the Gulf of Mexico and the eastern Sierra Madre meet. A pass through these two features gives Monterrey

Figure 3.11 The Metro is the backbone of Mexico City's public transport system, transporting over 2 million passengers a day via 11 lines. (Photo by Irma Escamilla)

direct access to the sea at the Tampico-Altamira port.

Monterrey was founded in 1579 as San Luís Rey de Francia. In 1596, it became known as the Metropolitan City of Monterrey. It was built on the west bank of the Santa Catarina River, according to the grid system dictated by the Law of the Indies, with streets crossing at right angles around a central plaza, which at the time was the Plaza de Zaragoza. Given its distance from the center of the country, Monterrey's population remained stationary until the 18th century, and it was not until the 19th century that the city began to grow significantly. In 1810, it had a population of only 7,000. After Mexico gained independence, the city established significant commercial links with the ports of Tampico and Matamoros. When Mexico ceded the territory of Texas to the United States in 1848, the new border region around the Rio Bravo (called the Rio Grande in the United States) began to prosper. Contraband and the cotton trade during the American Civil War promoted the growth of Monterrey and that of many other border cities. Between 1882 and 1905, railroads linked Monterrey with Laredo in Texas and with Tampico, Matamoros, and Mexico City, establishing the base for Monterrey's industrial development.

Monterrey's greatest industrial development took place between 1890 and 1910, when local elites invested in industry. They took advantage of the domestic market and proximity to industrializing regions in the United States. Corporations established by the Monterrey business elite at this time were notably diverse, ranging from capital goods (e.g., cement, bricks, glass, machinery) to consumer products (e.g., beer, soft drinks, furniture, textiles, cigarettes, soap). This diversification pro-

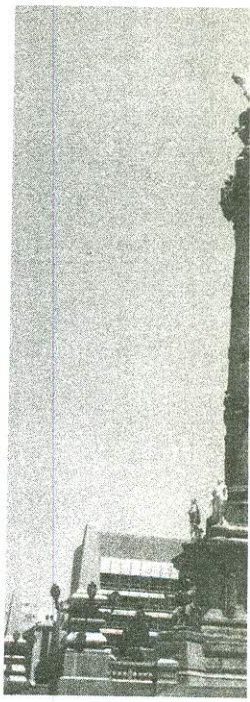
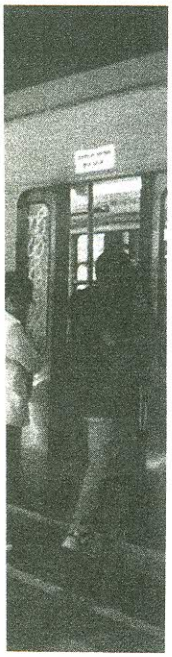


Figure 3.12 Among th
monuments in Mexico C
Independence, which lo
Reforma. It is here that
congregate in collective
example, of sporting vic
Escamilla)

duced a multiplier effe
of the economy such
financial services, an
members of the origir
have been linked to n
tions involved in dive
After the Mexican Revo
these family member
famous Monterrey Gro

The economic exp
spurred industrial inte
rey Group. This entaile
in other regions of the
tage of the internal
granted by the Mexica
trial investment forti



ran ort
s. oto by

called the Rio Grande in
an to prosper. Contra-
de during the American
e growth of Monterrey
border cities. Between
linked Monterrey with
h Tampico, Matamoros,
tblishing the base for
levelopment.
it industrial develop-
n 1890 and 1910, when
industry. They took
stic market and prox-
regions in the United
tablished by the Mon-
this time were notably
capital goods (e.g.,
ac ry) to consumer
drinks, furniture, tex-
his diversification pro-

Figure 3.12 Among the most distinctive monuments in Mexico City is the Angel of Independence, which located on the Paseo de la Reforma. It is here that the city's inhabitants congregate in collective celebration, for example, of sporting victories. (Photo by Irma Escamilla)

duced a multiplier effect among other sectors of the economy such as mining, agriculture, financial services, and transport. About 40 members of the original 10 powerful families have been linked to more than 260 corporations involved in diverse economic activities. After the Mexican Revolution of 1910, most of these family members formed part of the famous Monterrey Group.

The economic expansion of the 1940s spurred industrial integration for the Monterrey Group. This entailed investing in factories in other regions of the country, taking advantage of the internal protection measures granted by the Mexican government. Industrial investment fortified the banking and financial sectors, and in 1943 the Monterrey Technological Institute of Advanced Study (Instituto Tecnológico de Estudios Superiores de Monterrey, ITESM) was founded to provide future generations of executives and administrators for Monterrey's industry with high-quality university educations. By 1960, the electronics industry was established, with pronounced growth in transport and car manufacturing. Factories spread along the edge of the city and transportation corridors. The automobile industry began supplying the growing Mexican automobile industry as well as the traditional core in Detroit, Michigan. In 1950, Monterrey generated 8% of Mexico's GDP; by 1970 this had increased to 10%. The oil boom of the late 1970s stimulated development of the petrochemical industry in Monterrey through petroleum-derived materials and fibers, marine exploration rigs, and submarine ducts.

Economic liberalization in the late 1980s ended advantages previously granted to Monterrey by the government. As a result, Monterrey looked to the export market. The arrival of foreign investment allowed various corporations to sell holdings, develop strategies of co-investment, and form strategic capital alliances with the United States, Europe, and Asia. Population grew at 2.3% per year in Monterrey from 1990 to 2005, which surpassed the growth rate in both Mexico City and Guadalajara.

In addition to hosting key educational, cultural, health-care, and business centers, Monterrey boasts entertainment attractions that are significant for both national and international tourism. One of the most famous landmarks of the city is the Cerro de la Silla, a hill that is famous for its likeness to a riding saddle (fig. 3.14). The Macroplaza, situated in the heart of Monterrey, is one of the largest plazas in the world. It stretches on for 100 acres

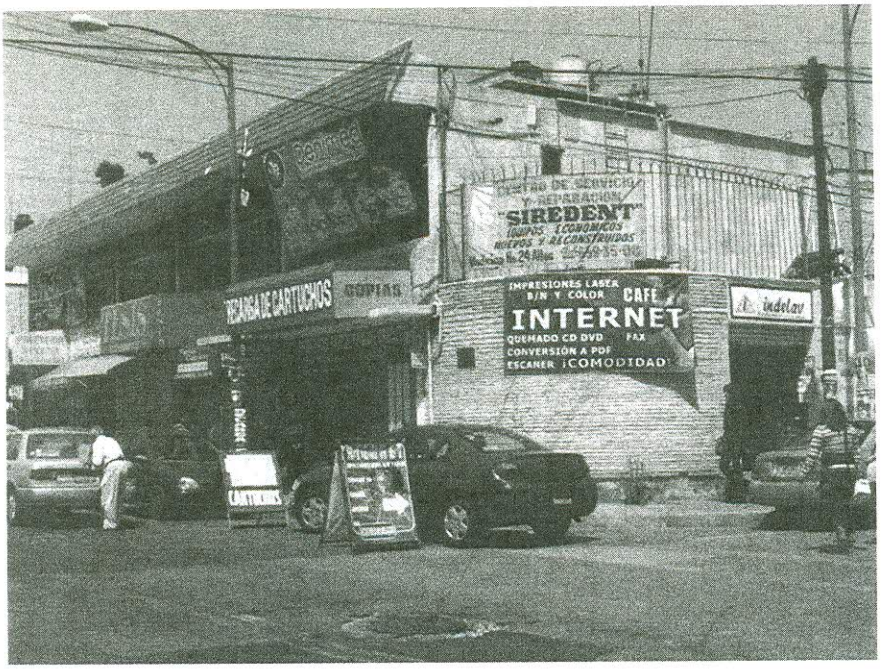


Figure 3.13 The demand of (primarily the young) population to "be connected" has meant a number of Internet cafes opening throughout the city, particularly in areas with schools nearby. (Photo by Irma Escamilla)

and contains a playful mix of green areas, monuments, and colonial buildings. Among the most important pieces are the bronze sculpture Fuente de Neptuno (Fountain of Neptune) by Spanish artist Luís Sanguino, the Homenaje al Sol (Homage to the Sun) by Mexican painter and sculptor Rufino Tamayo, and the Faro del Comercio (literally, the Lighthouse of Commerce) by renowned architect Luís Barragán. There are also art galleries, theaters, and a number of museums in the historic center, including the Museo Metropolitano de la Ciudad de Monterrey (Metropolitan Museum of Monterrey); the Museo de Historia Mexicana (Museum of Mexican History); the Museo de Arte Contemporáneo (Museum of Contemporary Art); the Museo de Ciencia, Arte y Tecnología (Museum of Science, Art, and Technology); and the Museo El Blanqueo. The Blanqueo Museum is a national heritage site; it has had its original façade restored and is home to the oldest manufacturing installation in Nuevo León. Commercial activity and services are evident in the large shopping malls such as Galerías Monterrey, Galerías Valle Oriente, Plaza Fiesta San Agustín, and Plaza San Pedro, which all host various "shopertainment" services including cinemas and restaurants, which attract shoppers from within and beyond the city limits.

San José, Costa Rica: Spanish America's Troubled Cultural Capital

San José is the political and economic capital of Costa Rica. Like most Latin American cities, San José is laid out in a grid pattern anchored by a series of town squares fronted by churches. In 2006, the Union of Spanish American City Capitals declared San José the

Figure 3.14 A panoram
shows the distinctive ph
Google-Earth)

cultural capital of Spa
Rica's relative economic
ical stability has made
in the region. In recent
has risen and is a seriou

San José is the larges
is more than twice the
Rica's second largest
Atlantic/Caribbean coa
primate cities in Latin
located in the geograph
The semi-humid and t
fertile soils of the re
agriculture, and high-q
such as specialty leaf to

ghout the
camilla)

restored and is home to
ng installation in Nuevo
tivity and services are
hopping malls such as
Galerías Valle Oriente,
n, and Plaza San Pedro,
; "shopertainment" ser-
s and restaurants, which
within and beyond the

a: Spanish America's
ltural Capital

al and economic capital
most Latin American
l out in a grid pattern
of n squares fronted
, the Union of Spanish
ls declared San José the

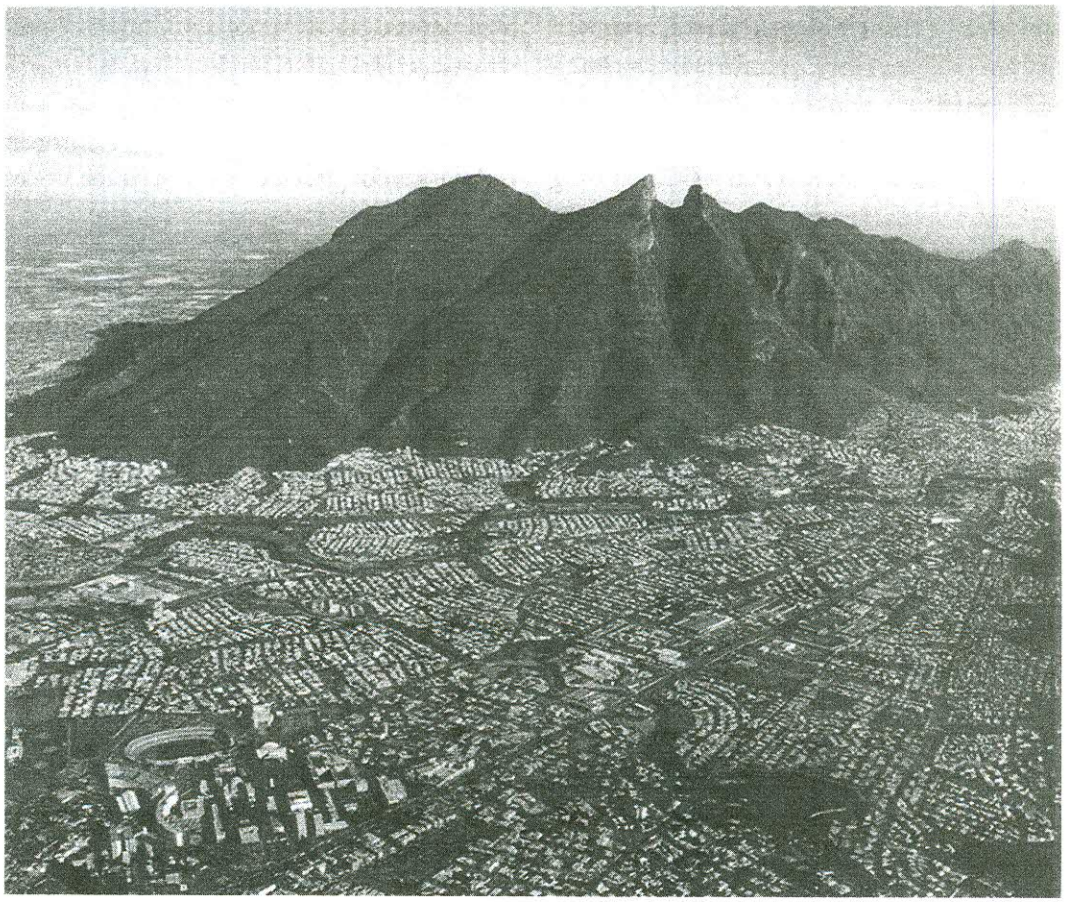


Figure 3.14 A panoramic view of Monterrey illustrates the process of metropolitanization and shows the distinctive physical feature of this Northern city: the *Cerro de la Silla*. (Photo by Google-Earth)

cultural capital of Spanish America. Costa Rica's relative economic prosperity and political stability has made San José the safest city in the region. In recent years, however, crime has risen and is a serious concern.

San José is the largest city in Costa Rica. It is more than twice the size of Limón, Costa Rica's second largest city, located on the Atlantic/Caribbean coast. In contrast to most primate cities in Latin America, San José is located in the geographic center of Costa Rica. The semi-humid and temperate climate and fertile soils of the region favor intensive agriculture, and high-quality export products such as specialty leaf tobacco grow well there. The region has long benefited from its privileged absolute and relative location. Since the colonial era, settlement and development have been concentrated in this part of Costa Rica. Over time, settlement gradually spread outward toward the coastal plains, a pattern that runs counter to the patterns experienced in most Latin American countries, where settlements first took hold at navigable ports on the coasts and gradually moved inward.

A series of hills within the Central Valley has not curtailed San Jose's expansion, whose metropolitan zone today encompasses Alajuela, Cártago, and Heredia. This conurbanization constitutes the "Central Region"

and spills into adjoining valleys and mountain regions. Although the Central Region includes just 15% of the country's land area, more than half of the national population lives there. Wealth generated from Costa Rica's mining and agricultural sectors has supported business investment in San José and the subsequent expansion of its metropolitan region. Relative improvements in health conditions and public services, in addition to natural increase and rural emigration, have contributed to the rapid growth of San José. The spread of metropolitan San José into once rural areas produces a steady reclassification of rural areas to urban zones. Urban sprawl has overtaken small towns and outlying villages to such an extent that some peripheral zones lack basic services such as housing, jobs, and schools.

Metropolitan San José, like most primate cities, contains the most important and largest industries, businesses, and residential areas of the country. This concentration implies changes in land use, private-sector investment, and the distribution of wealth. San José consists of 14 *cantones* (administrative units similar to counties in the United States). Most *cantones* are residential areas that function as bedroom communities and are distant from most places of work, retail commerce, and medical and educational facilities. There is a growing demand in the more distant *cantones* for jobs, housing, and infrastructure to accommodate the city's growth. As such agglomeration reinforces San José's primacy, it disadvantages other regions of Costa Rica which are less densely populated and suffer from poor public services, which in turn reinforces primacy. Urban sprawl imposes high economic costs, necessitates the consumption of fossil fuels, and exacts human costs in the form of long and stressful commutes. These problems are exacerbated by a road network that cannot accommodate present usage. Moreover, San José's sprawl threatens rich agricultural and protected lands in the Central Valley. In general, rapid growth and congestion threaten the sustainability of this capital city.

An unanticipated consequence of metropolitan sprawl is the hollowing out of the city's core as residential and business development shifts to peripheral zones of the city. The historic center of San José is no longer the economic, political, and social nexus of the country. San José's uncontrolled growth has led to a loss of identity, especially in the historic core. As often occurs in the process of industrialization and urbanization, the social fabric of residents in the traditional center is frayed. Crime, juvenile delinquency, and the proliferation of gangs threaten overall security and the long-standing high quality of life in San José. These problems afflict both residents and tourists. To address problems associated with San José's rapid and unplanned growth, various public–private partnerships have been formed by public agencies, international associations, nonprofit organizations, and the municipality. Efforts, not unlike those under way in some Anglo American cities, are now directed at revitalizing and bringing people and jobs back to the city center.

In recent years, Costa Rica has developed its tourism industry. It takes advantage of a variety of natural resources, including an excellent climate and such spectacular physical features as mountains, volcanoes, beaches, and rainforests. Tourism has energized the national economy because it has attracted hard currency expended by visitors from North America, Europe, and Asia. Most tourist ventures start in San José and fan out to the interior of the country. Although this creates economic multipliers for San José and

its hinterland, it als
environmental stress.
ture (e.g., expansiv
restaurants, and land
must be maintained
ally to meet internat
only is this costly, but
ability of the very
tourists. As the arriva
tourists and the emb
tours, San José exp
infrastructural, and
that accompany Co
notoriety as a safe,
tourist destination.

Charlotte Ama
the Less

Charlotte Amalie
Thomas is the port c
Islands (fig. 3.15). T
of St. Thomas has l
port whose wareho
structures that date t
bay affords vistas fi
high as 1,500 feet, in
Drake's Seat. In addi
and cruise ship por
visitors to St. Thor
renowned beaches s
recent years, Charlot
from proximity to Pu
Marín International
which brings in larg
passengers who ca
aircrafts for a 30-mi
Amalie.

Christopher Colu
small number of nat
Virgin Islands durin
the Americas in 1493
indicate that Taino

its hinterland, it also creates economic and environmental stress. The tourism infrastructure (e.g., expansive networks of hotels, restaurants, and land and air transportation) must be maintained and upgraded continually to meet international expectations. Not only is this costly, but it threatens the sustainability of the very attractions that draw tourists. As the arrival point for international tourists and the embarkation point for most tours, San José experiences the financial, infrastructural, and environmental pressures that accompany Costa Rica's international notoriety as a safe, secure, and high-quality tourist destination.

Charlotte Amalie: A U.S. City in the Lesser Antilles

Charlotte Amalie on the island of St. Thomas is the port capital of the U.S. Virgin Islands (fig. 3.15). The mountainous island of St. Thomas has long been a deep-water port whose warehousing district includes structures that date to the 19th century. The bay affords vistas from lookout points as high as 1,500 feet, including the well-known Drake's Seat. In addition to a small airport and cruise ship port in Charlotte Amalie, visitors to St. Thomas take advantage of renowned beaches such as Magen's Bay. In recent years, Charlotte Amalie has benefited from proximity to Puerto Rico's Luís Muñoz Marín International Airport in San Juan, which brings in larger aircrafts filled with passengers who can transfer to smaller aircrafts for a 30-minute flight to Charlotte Amalie.

Christopher Columbus encountered a small number of natives in the present-day Virgin Islands during his second voyage to the Americas in 1493. Archaeological records indicate that Taino, Arawak, Carib, and Ciboney peoples occupied the islands and lived in small fishing communities. As was the case elsewhere in the Caribbean, the native populations died off relatively quickly after European contact. The Spanish focused their energies on Puerto Rico, and St. Thomas remained unprotected, leaving Charlotte Amalie's sheltered coves to be frequented by mariners and pirates, including Blackbeard and Bluebeard, as well as by European settlers.

The Danish West India Company chartered the islands in 1671 after King Christian V decided to secure them for plantations. The Danish government supplied male convicts to work the plantations, but soon opted to allow colonists from neighboring islands to settle there, as well as to permit the importation of African slaves. By 1680, there were more Black slaves (175) than European settlers (156). Adjacent islands Buck and Water served as pasture lands for St. Thomas, and Taphus (meaning "tap house" or beer hall) was renamed Charlotte Amalie in 1691 after King Christian V's wife. It was the main port and was connected to about 50 plantations by a single road, which remains a main highway today. By the early 18th century, more than 3,000 residents occupied St. Thomas, and sugar production and slave trading were the economic mainstay.

After the Danish Government took over the administration of the islands in 1754, the capital was moved from St. Thomas to Christiansted, St. Croix. St. Thomas's economy transitioned from agriculture and slave trading to general commerce. Charlotte Amalie prospered as a free port in 1815, and English, French, German, Italian, American, Spanish, Sephardic, and Danish importing houses operated there. A growing share of West Indian trade passed through the port. By the 1840s, the rise of steamships made Charlotte Amalie an ideal coaling station for ships sailing between

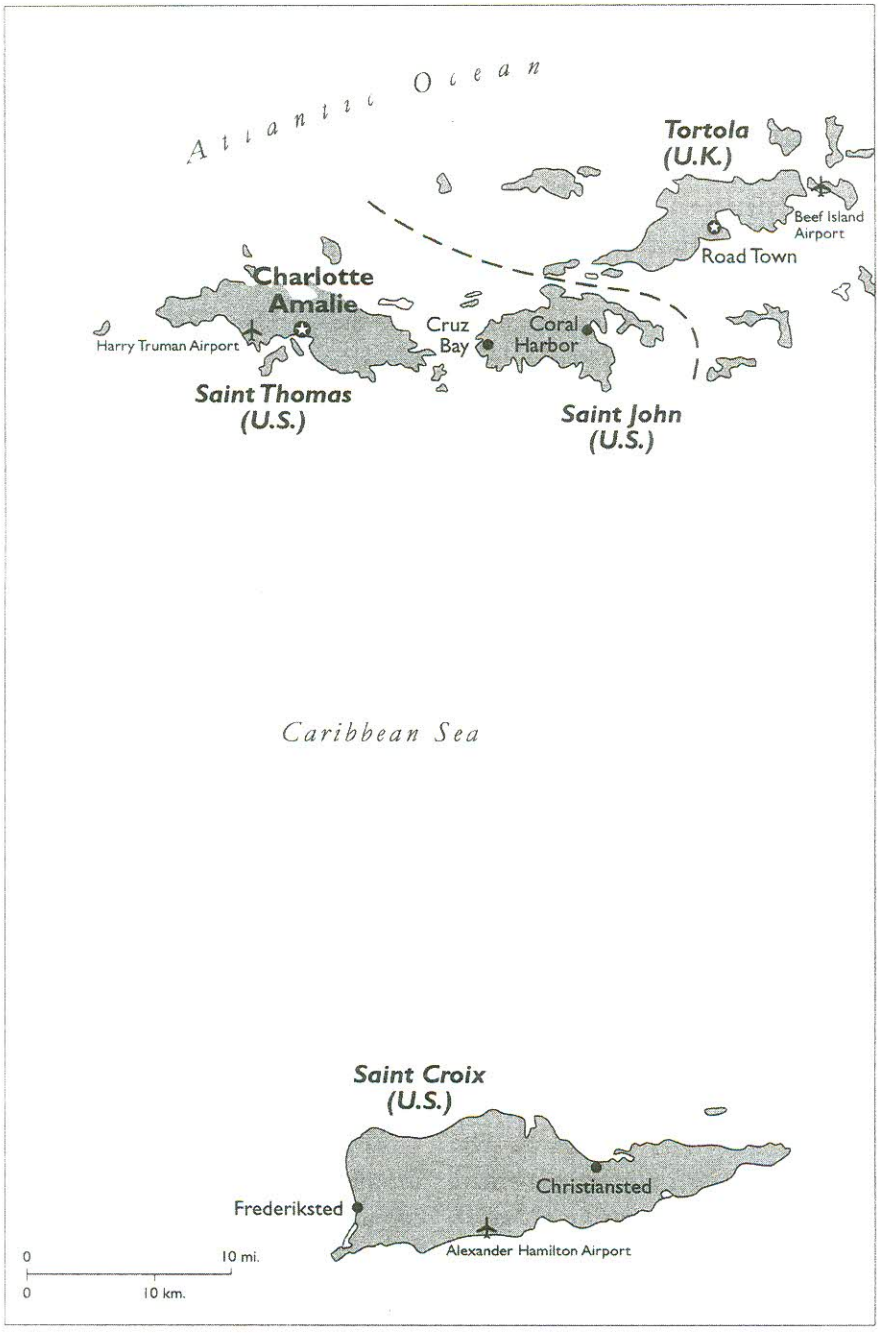


Figure 3.15 Charlotte Amalie, St. Thomas, U.S. Virgin Islands.

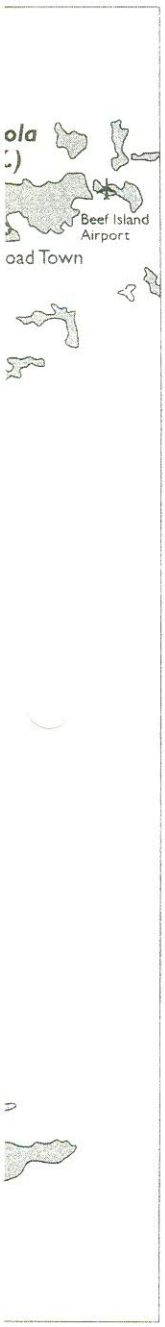
South and North America. However, Spanish and English islands gradually began importing coal directly from producers, and Charlotte Amalie was eventually sidestepped in this trade. The abolition of slavery in 1848 further diminished St. Thomas's commercial role in the region.

The United States purchased the Danish West Indies for $25 million in gold in 1917. St. Thomas fell under U.S. Navy Rule until

Figure 3.16 V
United States V

1931. When C
tourists in 196(
As a U.S. posse
for mainland
homes. In 200(
11,004 of the
Thomas Island
halls, and dow
island, just 13 r
(6 km) wide (a
km]) anchor a
lotte Amalie is
small, narrow c
duty-free shops
tourists. Its ch
shifting econon
of cultural attra
of a well-known
1700s. Built by
Denmark, the s
engineers who
bolize the lack c
ization, industri

Tourism will
Island economy



s's commercial role in

pu ased the Danish
illion in gold in 1917.
U.S. Navy Rule until

Figure 3.16 View of Charlotte Amalie, St. Thomas, from the tram station. (Photo courtesy of United States Virgin Islands Department of Tourism)

1931. When Cuba was barred to American tourists in 1960, St. Thomas's prominence rose. As a U.S. possession, it has proven to be a haven for mainland Americans seeking second homes. In 2000, Charlotte Amalie was home to 11,004 of the 51,181 residents populating St. Thomas Island. Today, the historic warehouses, halls, and downtown buildings of this small island, just 13 miles (21 km) long and 4 miles (6 km) wide (approximately 31 sq mi [126 sq km]) anchor a thriving tourist industry. Charlotte Amalie is a bustling, congested port with small, narrow cobblestone streets packed with duty-free shops that sell a variety of goods to tourists. Its checkered colonial history and shifting economic base afford tourists a variety of cultural attractions. The "99 steps" form part of a well-known stairway that dates to the mid-1700s. Built by the Danes of ship ballast from Denmark, the steps were planned by Danish engineers who visited St. Thomas. They symbolize the lack of bottomlands for easy urbanization, industrial production, and agriculture.

Tourism will continue to drive the Virgin Island economy, while a relatively small island with limited flatlands will constrain Charlotte Amalie's growth. The city is well endowed to accommodate the more than 1 million cruise ship passengers who saunter through its colonial streets. Only land-use controls and a carefully monitored master plan will safeguard the spread of hilltop homes that stake a claim overlooking blue Caribbean waters, yet indelibly alter the viewscape (fig. 3.16).

Havana: The Once and Future Hub of the Caribbean?

Diego de Velázquez de Cuéllar founded San Cristóbal de Habana in 1519 as one of seven military outposts (*villas*) around the island. Just two of these original settlements—Camaguey (then Puerto Principe) and Santiago—were founded on good harbors. Havana was first located in 1514 on the Broa Inlet, at the Gulf of Batabanó, on the island's southern (Caribbean) side (fig. 3.17). A shallow port and generally swampy (and unhealthy) site forced colonists to relocate directly north, on the Atlantic side of the

Box 3.3 Getting By in Kingston, Jamaica

Kingston—roughly 12 times the size of Montego Bay, Jamaica's second largest city—is a classic primate city. Efforts at urban planning have been thwarted by lack of administrative authority and funds, resulting in a highly mixed urban landscape.

Older, declining neighborhoods, built over the past century near the colonial center, are now densely occupied. They are said to have been "tenementized," as original one-family houses have been subdivided many times over and rented to very poor rural migrants who share cooking and bathing facilities. Life in these now lower-class neighborhoods tends to take place on the streets and in the yard because interior spaces are too crowded.

Kingston also houses squatters. The city is situated on uneven land crossed by many gullies that carry intermittent rainfall south to the sea. Rural migrants now occupy the gully interstices that separate more formal neighborhoods. These squatters fence their spaces and raise gardens and animals, much to the annoyance of their middle-class neighbors. Some manage to tap into electricity illegally and even gain access to piped water, but they rarely have sufficient sanitary plumbing facilities. As a result, urban groundwater pollution is a serious problem. In the Kingston periphery, squatter shantytowns are occupied by people who have gathered enough personal and material resources to flee inner-city slums. Shantytowns actually afford their residents greater potential for social and spatial mobility than does more formal inner-city housing. Their location near the sea or agricultural land makes fishing and small-scale gardening possible; thus, the cost of living is lower and saving,

rendering investmen
Community relations
rapidly, with old struc
crete block and wood

Inflation, recessio
to create its own forr
during slavery, when
ply high-demand pro
including the provisio
to urban households;
sewing services; and
informal economy se
retain inefficiencies t
larger firms that creat
and entrepreneurial i

Life for most peo
crime rates, and lack
who have studied urb
People survive by con
care of children and
personal support duri

narrow island. Although Santiago de Cuba reigned as the official island capital until the late 16th century, Havana's relative location was enhanced by the discovery of the Bahamian Channel which served as a key transshipment route for goods exchanged between the Americas (chiefly Mexico) and Europe. In fact, Havana's coat of arms includes its three principal fortresses (La Fuerza Real, El Morro, and La Punta) and a key that designates the city's strategic location as the "key" to the Gulf of Mexico and the Americas. Lacking mineral wealth and a large native population to enslave or evangelize, Havana served as a strategic refurbishing port and a temporary holding place for precious metals coming from Mexico and Andean South America.

Military engineers enhanced this colonial port by building a network of fortresses over the next two-and-a-half centuries. Flotillas carrying wealth out of the ports of Cartagena and Santa Marta in Colombia, Nombre de Díos in Panama, and Veracruz in Mexico would dock in the safe waters of Havana before crossing the Atlantic for Seville, Spain (see fig. 3.5). Accordingly, Havana's role as a major supply port meant that ranching, timber, shipping, and allied services would define the colonial city's economy. It lacked the wealth of Lima, Peru, and Mexico City but served as a vital link in the Spanish colonial empire. The completion of a major aqueduct in 1592 that brought fresh water from the Almendares River west of the city sealed Havana's fate as an official city in the Spanish

empire. It surpassed
political and economic
not ceded that position

Havana's location on
one of several geologic
the island, made it an
transshipment point.
entrance to the harbor fi
that military officers oft
it at night to entrap in
plain with mild marine
that yield to a gently u
the city is unconstrained
ers except for the bay (w
to the east until a tun
1957). Rather, settleme
wall on the western fl
construction of which c

rendering investment in self-improvement possible for those who have steady jobs. Community relations can be strong and supportive. Shanty housing stock is upgraded fairly rapidly, with old structures built out of scrap being soon replaced with more substantial concrete block and wood structures.

Inflation, recession, and job loss have forced approximately half of Kingston's labor force to create its own forms of employment. The Caribbean urban informal economy got its start during slavery, when slaves, legally blocked from working for wages, devised ways to supply high-demand products and services for cash. The range of informal jobs is now vast, including the provision of transport; the procurement and delivery of home-grown produce to urban households; the preservation of food for sale in market stalls; the provision of sewing services; and the production crafts for tourists. Although the flourishing Jamaican informal economy serves a host of positive social functions, these small-scale enterprises retain inefficiencies that inhibit overall economic growth. Few informal businesses grow into larger firms that create jobs and pay taxes. There is rarely money left over for reinvestment, and entrepreneurial innovation can be stifled by cronyism and reciprocal obligations.

Life for most people in Kingston is circumscribed by low income, poor housing, high crime rates, and lack of adequate transportation to jobs, schools, and shopping. Yet most who have studied urban life there seem to concur that the sense of community is strong. People survive by constantly exchanging favors: surveillance of each other's property, shared care of children and elderly, shared food, the lending of small amounts of money, and personal support during times of triumph or sadness.

empire. It surpassed Santiago de Cuba in political and economic significance and has not ceded that position in over four centuries.

Havana's location on a pocket-shaped bay, one of several geological formations dotting the island, made it an ideal warehouse and transshipment point. So narrow is the entrance to the harbor from the Florida Straits that military officers often drew chains across it at night to entrap intruders. Located on a plain with mild marine terrace escarpments that yield to a gently undulating topography, the city is unconstrained by topographic barriers except for the bay (which curtailed growth to the east until a tunnel was completed in 1957). Rather, settlement was confined by a wall on the western flank, the rudimentary construction of which commenced in 1663. By 1740, when the last stone was laid, a polygon consisting of nine bastions, several parapets, and escarpments completed the city's defensive system. The walled city at the time included 179 blocks, 56 streets, 5 plazas, 14 churches and convents, 2 hospitals, 6 military barracks, and a jail. However, a wise British officer knew the city was unprotected on the eastern flank of the bay, and in 1761 disembarked a small squadron of men to the east of Havana. In just one month, the British bombarded the old city, disrupted its food supplies, and forced the flag of the British Empire to fly over Havana. The following year Cuba was traded for Spanish Florida, and Havana's urban geography would never be the same.

In 1740, slave laborers replaced the simple ramparts with an expensive wall made from

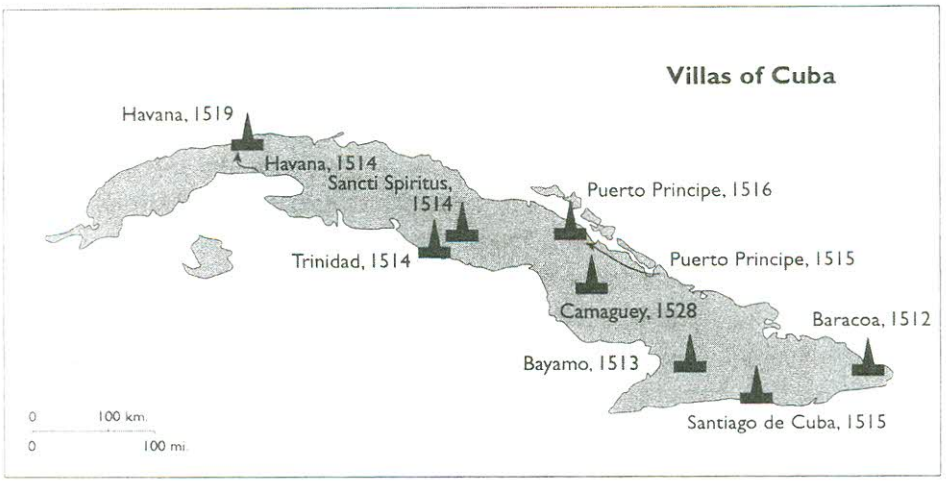
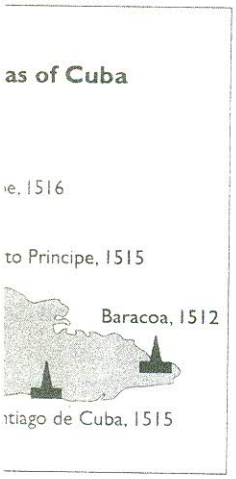


Figure 3.17 Map of Villas of Cuba. *Source:* Joseph Scarpaci, Roberto Segre, and Mario Coyula, *Havana: Two Faces of the Antillean Metropolis* (Chapel Hill: University of North Carolina Press, 2002), 13.

crushed limestone and crudely pressed rock that was cemented by a mixture of oxen blood, eggs, and sand. However, with just two main gates, traffic inside the old quarters became congested, and the tons of manure and urine that accumulated in the tropical heat made life unpleasant. A sugar boom following the British occupation of the 1760s brought commerce and residents to Havana, and crowding exacerbated problems within the walls. In response, new neighborhoods sprung up outside the walled city, and the elite gradually left the walled quarters. In the early 1860s, Havana's walls were torn down, opening up a huge expanse of city blocks that were ideal for urban development. A series of civil wars between the Cuban colony and Spain, however, would delay new construction. Between 1868 and 1898, war aggravated the quality of life, deteriorated the city's infrastructure, and—except for the Albear water system completed in 1893—few public works enhanced Havana.

When the Americans occupied Cuba after the 1898 Spanish–American War under the terms of the Platt Amendment (1889–1902), they found Havana to be a lackluster place. It had few paved roads and modern amenities such as telegraph wires, public lighting, sidewalks, and regular refuse pick-up and disposal. Ripe for investment, U.S. business speculators poured into the city. Road construction, railroad expansion, banks, custom's houses, sugar and cigar-factory construction, telephone services, and the newly arrived automobile offered opportunities for American capitalists. The U.S. Army Corps of Engineers lent a hand, particularly in expanding, raising, and extending the seaside promenade El Malecón—a striking boulevard that graces Havana's scenic waterfront (fig. 3.18).

Over the course of the 20th century, Havana would become a horizontal city in the mode of Los Angeles and less a high-density, New York–like city. Unlike Charlotte Amalie and other Caribbean ports, Havana could expand across a wide coastal plain. It developed a series of suburban enclaves west and south of the bay. Automobile commuting for a middle class of white-collar workers drove this suburbaniza-



ɔerto Segre, and
pel Hill: University

ım dment (1889–1902),
to ɔe a lackluster place. It
ds and modern amenities
ires, public lighting, side-
ar refuse pick-up and
ınvestment, U.S. business
d into the city. Road
oad expansion, banks,
gar and cigar-factory con-
ɔ services, and the newly
offered opportunities for
ɔ. The U.S. Army Corps of
d, particularly in expand-
ending the seaside prom-
-a striking boulevard that
ıic waterfront (fig. 3.18).
f the 20th century, Havana
izontal city in the mode of
ɔss a high-density, New
ke Charlotte Amalie and
ɔts, Havana could expand
plain. It developed a series
w nd south of the bay.
ting for a middle class of
drove this suburbaniza-

tion model, and led to a scattered and deeply segregated pattern of urban growth. While a streetcar network operated until the early 1950s, the automobile and bus would link Havana's new suburban and exurban developments. When the revolution of 1959 triumphed, about 1 in 20 residents were living in shantytowns of some sort. The socialist government imported models of high-rise prefabricated buildings like those used in Eastern Europe and the former Soviet Union. Planners and politicians curtailed population movement to Havana because the city was considered a sort of parasite that for centuries had drawn disproportionate wealth at the expense of the rest of the nation. Only 1 million residents claimed Havana as their home in 1959, and the population had barely surpassed the 2 million mark 50 years later. Over the same period, Mexico City and Lima, Peru, had increased six- and three-fold respectively.

This checkered pattern of urban history, warfare, and revolutions has given 21st century Havana a unique urban morphology. It is a polycentric city that has preserved distinctive architectural designs and land uses. Colonial, Republican, and new government centers, as well as social and cultural districts, characterize this panoply of urban nodes (fig. 3.19). Although the capital is, like Washington, D.C., largely devoted to services, it is one of the few Latin American cities where rather benign light industry (i.e., cigar making) surrounds the colonial and Republican government centers. This economic activity ranks among the top hard currency generators for the government, but remains relatively unnoticeable to the casual pedestrian.

In the first three decades of the revolution, Havana was largely a "closed" destination; few tourists came, and those who did hailed primarily from the former Soviet Union trading-bloc member states. Moreover, migration to Havana from elsewhere is strictly controlled by a food-ration book (*la libreta*) and other government controls. However, the demise of the USSR in 1991 led to a major crisis called the "Special Period in a Time of Peace." The government tightened gasoline rations as Cuba's ability to exchange sugar for Soviet oil disappeared. Thousands of un- and underemployed Cubans continue to migrate illegally to Havana, mainly from the eastern provinces where the dwindling sugar economy has been devastated. In typical Cuban humor, these immigrants are called *palestinos* because they hail from the east.

Other changes are also visible in Havana. As fuel subsidies from the USSR ended, and the relative cost of gasoline soared, bus routes were scaled back to half their number, and bicycling boomed (from some 70,000 bicycles in 1989 to 1 million in 1999). Tourism was seen as a "necessary evil" to sustain the island's economy, and the city's Old Havana district (Habana Vieja), a UNESCO World Heritage Site since 1982, became a prime destination for newfound cultural tourism. In 1993, the City Historian of Havana created a moneymaking corporation to address housing, hotel construction, road paving, plaza reconstruction, and urban revitalization. This firm, Habaguanex, has become one of the most powerful state enterprises in post-Soviet Havana. The firm has embarked on an ambitious project to rehabilitate buildings and spaces in Habana Vieja. International tourism has grown from about 25,000 annual visitors to Cuba in the late 1970s to just over 2 million visitors in 2006, equivalent to tourism to nearby Cancún, Mexico. Tourism is the new engine of economic growth in both Havana and in Cuba more generally.

Unlike Charlotte Amalie and many other Caribbean port capitals, Havana is home to a world-class biotechnology industry and boasts the third busiest airport in the region.

Figure 3.18 El Malecón as seen from atop the Focsa Building in Vedado, looking east, running along the Florida Straits past Centro Havana to Habana Vieja. (Photo by Joseph Scarpaci)

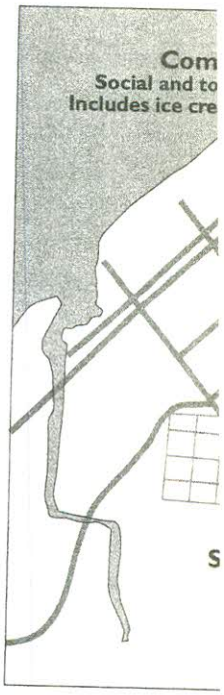


Figure 3.19 The po
Segre, and Mario Coy
of North Carolina Pre

It possesses the open space for more growth, either in the form of vacation homes for North Americans or returning Cuban-Americans or to accommodate a U.S. tourist market. Such growth, however, depends on how Washington and Havana negotiate the terms of the long-standing trade embargo that the United States has imposed on Cuba since 1962. In contrast to Charlotte Amalie, Havana attracts only a few thousand cruise ship passengers annually, largely because shipping companies face legal problems from the United States if they conduct business in Cuba. Nevertheless, the Caribbean manages some of the busiest maritime traffic in the world; approximately 50,000 ships navigate there and carry 14.5 million tourists annually. Havana will be on the radar of urbanists who are interested in issues of smart growth, sustainable development, and sustainable tourism as the 21st century unfolds.

URBAN CHALLENGES

Some of Middle America's and the Caribbean's largest metropolises, particularly those in Mexico, reveal slowing urban rates of growth that can be attributed to a demographic transition and a decline in rural-to-urban migration. Nevertheless, these metropolitan expanses are increasingly spreading out well beyond their original limits. As a result, the pattern of urban settlements has become more dispersed than in the past as cities increasingly encroach on the adjacent countryside. Urbanization has spatially, economically, and socially incorpo-

rated many smaller t
process. Guadalajara,
in Mexico; San Jos
Guatemala City in
process. Tools of urba
are needed to manage
tion (see box 3.2). Des
"hollowing out" of tl
metropolises, the cap
dominate in most cou

Mid-sized cities, o
maintained an impres
growth. Most mid-siz
have increased their r
the national urban p
ate-sized cities, more
now offer new promis
enhanced quality of lif
planners and adminis
will be challenged to

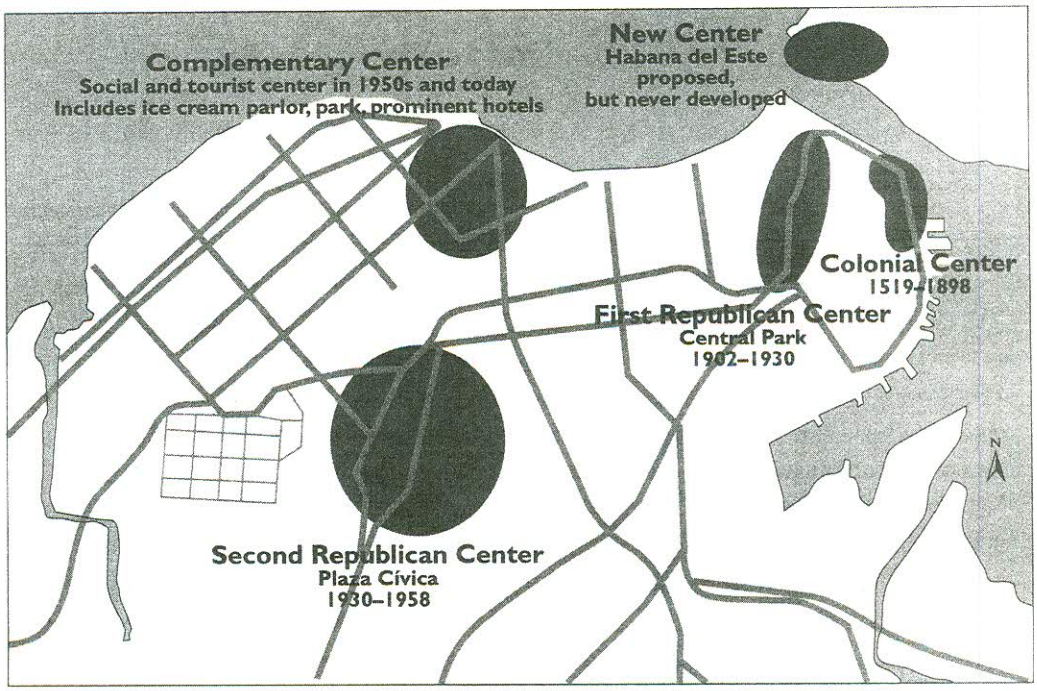


Figure 3.19 The polycentric city of Havana. *Source:* Based on Joseph Scarpaci, Roberto Segre, and Mario Coyula, *Havana: Two Faces of the Antillean Metropolis* (Chapel Hill: University of North Carolina Press, 2002), 87.

rated many smaller towns and cities in this process. Guadalajara, Puebla, and Mexico City in Mexico; San José in Costa Rica; and Guatemala City in Guatemala reflect this process. Tools of urban and regional planning are needed to manage this level of urbanization (see box 3.2). Despite a population loss or "hollowing out" of the city center in these metropolises, the capital city continues to dominate in most countries.

Mid-sized cities, on the one hand, have maintained an impressive rate of population growth. Most mid-sized cities in the region have increased their relative contribution to the national urban population. Intermediate-sized cities, more than very large cities, now offer new promise for job creation and enhanced quality of life. Nevertheless, urban planners and administrators in these cities will be challenged to avoid replicating the problems that have plagued larger metropolitan areas. The viability of intermediate-sized cities will depend mainly on their economies, including the degree of integration at the global scale, the type of articulation they maintain at the national and regional level, and the extent to which they can tap into their comparative advantages.

Traditional rural–urban patterns of migration have been replaced in the last 15 years by a more diverse process characterized by movement from city to city. For instance, inter-urban migration is the principal form of population movement in Mexico, where almost half of all migrants leave one city for another. Given that this migration pattern will continue to be important, planning guidelines and policies need to pay attention to this dynamic. It is important to recognize that cities in the region, despite the many

Box 3.4 Race, Status, and Remittances in Haiti

Edy is a 52-year-old horseman and assistant tour guide who lives in the outskirts of Cap Haitien, Haiti's fourth largest city with 113,000 residents. He is a trim ebony-skinned man who clearly is in good physical condition despite his white beard and hair. He earns his living by holding the reins of horses that are mounted by tourists who ride 90 minutes from the Sans Souci palaces to the mountaintop where the UNESCO World Heritage Site of La Citadel is located. The Citadel is a huge fortress built by free Haitians in the country's first army between 1805 and 1813, during the rule of Haiti's first postcolonial leader, King Henri Christophe. The fortress was designed to thwart an invasion should Napoleon Bonaparte attempt to reclaim the colony of St. Domingue, which after independence was called Haiti, meaning "mountainous country" in Arawak-Taino languages.

In the early 1980s, Edy had spent three years in North Carolina and South Carolina as a legal migrant laborer. He picked apples, pruned peach trees, and weeded tobacco fields while in the United States. His day-labor work generated remittances for him to send back to his family in the capital city of Port-au-Prince, and it also gave him a chance to learn enough English to work at the Citadel in tourism.

The lives of Edy's two children have also been impacted by transoceanic travel, but with an added layer of kinship and paternity. In the late 1970s, Edy fathered a young boy, Claude, but refused to recognize the child. Claude's mother toiled as a domestic servant in the upper-income neighborhood of Petionville in Port-au-Prince and raised the boy as a working single mother. When Claude was five years old, Edy fathered a daughter, Loraine, in a brief relationship with a light-skinned, high-school educated civil servant. Shortly after Loraine's birth, her mother left Edy (taking Loraine) and married a similarly light-skinned man.

Two notable differences surface between siblings Claude and Loraine. Being born out of wedlock and having darker skin than his sister has made life challenging for Claude. He never received financi
made contact with his
stepfather gave her a
earn a fellowship to a
Methodist Church.

Claude has felt the
only a formal educatio
security and no benefi
and training program f
born Wyclef Jean. Thi
Claude's trip to Miami f
is replete with Yelé Hai
try to keep garbage in
in the delivery of publi
ingly providing essenti

Claude and Loraine
Loraine was in the mid
opportunity to prove hi
for so long was shunne
skin. Yet Claude is lee
expected to provide su
the Citadel.

Wyclef Jean, himself
gainful employment for
shantytowns (*bidonville*
with any form of social
in his golden years.

challenges outlined in this chapter, are still attractive to those in search of gainful employment. Moreover, the countryside seems little able to retain rural residents because of the structural problems that are entrenched there.

Social and geographic segregation in the region's cities has deepened and is a serious problem. Demand for exclusive high-income communities often leads to the displacement of poor groups from targeted urban neighborhoods. Public housing projects concentrate at the city's edge because of lower land values. In turn, this exacerbates social and spatial segregation. High-income groups increasingly isolate themselves defensively in limited-access or gated communities that are adorned with costly houses and attractive retail, entertainment, and recreational facilities, and which feature close proximity to occupational sites, schools, and other amenities. At the same time, poor households continue to occupy precarious houses on remote and marginal lands that lack infrastructure and are adjacent to high-risk and undesirable land uses (e.g., landfills, utility plants, factories, water-treatment plants, flood plains, steep terrain). City legisla-

tion should attenuate this
gation by influencing the
the real estate market.

About 40% of the regi
living below the poverty
15% of the population
poverty. Data further reve
concentration of the poor
of every three poor person
that same year, a greater
previous decade. Consid
also evident within the reg
in Costa Rica amount to

aiti

the outskirts of Cap
ebony-skinned man
d hair. He earns his
ride 90 minutes from
Heritage Site of La
in the country's first
al leader, King Henri
Napoleon Bonaparte
nce was called Haiti,

l South Carolina as a
eeded tobacco fields
for him to send back
m a chance to learn

anic travel, but with
a ig boy, Claude,
servant in the upper-
y as a working single
aine, in a brief rela-
ortly after Loraine's
-skinned man.
e. Being born out of
nging for Claude. He

never received financial support from his father, and it is only in recent years that Edy has made contact with his son. Loraine, on the other hand, is a lighter-skinned mulata whose stepfather gave her a good education at a private, English-speaking school. She was able to earn a fellowship to a midwestern state university in the United States through the United Methodist Church.

Claude has felt the swings of the Haitian economy's expansions and contractions. With only a formal education to the eighth grade, he had been working in menial jobs with little security and no benefits. Recently though, he has been working as a crew leader for a jobs and training program founded by the international reggae, hip hop, and folk singer, Haitian-born Wyclef Jean. This NGO, Yelé Haiti (a U.S. 501c (3) nonprofit organization) funded Claude's trip to Miami for a meeting with different functionaries in the NGO. The capital city is replete with Yelé Haiti workers in green t-shirts who sweep the streets and sidewalks and try to keep garbage in the city's dumpsters from overflowing. As the Haitian state retreats in the delivery of public services, nonprofit organizations such as Wyclef Jean's are increasingly providing essential services.

Claude and Loraine were not able to meet in Miami during Claude's recent visit because Loraine was in the middle of final examinations. Still, the trip provided Claude with a new opportunity to prove himself as a leader, and it has brought new attention to the man who for so long was shunned by his family for being born out of wedlock and for having dark skin. Yet Claude is leery of his father's new attention because he knows that he will be expected to provide support as Edy ages and can no longer climb the arduous trails up to the Citadel.

Wyclef Jean, himself an immigrant to Brooklyn, New York, at the age of nine, is providing gainful employment for thousands of Haiti's youth, especially those in Port-au-Prince's vast shantytowns (*bidonvilles*). However, neither the state nor NGOs will be able to provide Edy with any form of social security. Extended kinship ties will be the only resource he will have in his golden years.

me groups increasingly
nsively in limited-access
that are adorned with
active retail, entertain-
l facilities, and which
y to occupational sites,
nities. At the same time,
nue to occupy precari-
and marginal lands that
l are adjacent to high-
an' es (e.g., landfills,
ries, water-treatment
ep terrain). City legisla-

tion should attenuate this kind of urban segregation by influencing the powerful forces of the real estate market.

About 40% of the region's population was living below the poverty line in 2005, while 15% of the population lived in extreme poverty. Data further reveal an increase in the concentration of the poor in urban areas. Two of every three poor persons resided in cities in that same year, a greater portion than in the previous decade. Considerable disparity is also evident within the region. While the poor in Costa Rica amount to about one-fifth of the national population, Mexico and Panama reveal a 35% poverty rate, and Guatemala, Honduras, and Nicaragua exceed the 60% mark. These latter three countries have levels of extreme poverty in excess of 30%. Haiti not only has the highest poverty rate in the region, but in the entire western hemisphere (box 3.4). Part of the indigence is mired in political instability, rampant corruption, and centuries of inept rule and colonialism. However, Haiti is not the only country in the region struggling to break through these structural and historical constraints. Rapid

Figure 3.20 Two aerial views of shantytowns (*bidonvilles*) in low-lying areas just north of the Port au Prince, Haiti city center. Flooding occurred in these areas after Hurricane Noel struck the island of Hispaniola on October 29–31, 2007. The storm claimed at least 30 lives in the Dominican Republic and 20 in Haiti. (Photos by Joseph Scarpaci)

urbanization has led millions of Haitians to precarious shanties (fig. 3.20). Poverty should be a priority on urban development agendas throughout the region.

Natural disasters in the Caribbean, Central America, and Mexico compound the challenges of regional poverty. A combination of physical factors and socioeconomic difficulties increase environmental risk and make preventing or mitigating natural disaster one of the main challenges of urban and regional planning. Most of the poor already live adjacent to hazardous conditions. Some of these are seemingly benign but are actually hazardous, such as low-lying areas near water (e.g., flood and coastal plains, creek beds) that may be prone to flooding, or deforested steep slopes that could be prone to mudslides. These settlements exist because of negligence in the enforcement of laws that would otherwise control where housing can be built. At times, however, turning a blind eye to informal settlements affords the state a less expensive option to providing healthy neighborhoods. Many settlements in the Caribbean, both shanties and planned developments, are fragile economically, socially, and environmentally. Natural disasters such as hurricanes merely exacerbate these conditions.

ıreas just north of the
lurricane Noel struck the
: 30 lives in the

plains, creek beds) that
ing, or deforested steep
prone to mudslides.
t because of negligence
of laws that would
re housing can be built.
ırning a blind eye to
affords the state a less
) providing healthy
y settlements in the
anties and planned
fragile economically,
ıer 'y. Natural disas-
ıes merely exacerbate

The severity of human, material, and environmental risk posed by different events does not always have a direct bearing on outcomes. This is especially true with fragile urban and productive infrastructure, the quality of housing, and the existence of regional planning. Early warning systems, capable management, and institutional and political development are fundamental steps in dealing with emergency preparedness and rebuilding in cities throughout Middle America and the Caribbean. Strong political will is needed to tackle the problems affecting the daily lives of people living in cities throughout the region, in keeping with 21st century goals of economic development through environmental sustainability.

SUGGESTED READINGS

Aguilar, Adrián G., and Boris Graizbord. 2002. "Evolution and Maturing of the Mexican Urban System." In Hermanus S. Geyer, ed., *International Handbook of Urban Systems: Studies of Urbanization and Migration in Advanced and Developing Countries.* Northampton, MA: Edward Elgar Publishing, 419–454. Presents studies of urbanization and migration in advanced and developing countries.

Blouet, Brian W., and Olwyn M. Blouet. 2006. *Latin America and the Caribbean.* New York: John Wiley. A survey of the physical and human geography of the region with a chapter on cities and a special section on housing.

Bolay, Jean-Claude, and Adriana Rabinovich. "Intermediate Cities in Latin America: Risk and Opportunities of Coherent Urban Development," *Cities,* 21, no. 5 (2004), 407–421. Examines how medium-sized cities relate to other cities in their national urban systems and to the wider world.

Edge, Kay, Heather Woofard, and Joseph L. Scarpaci. 2006. "Mapping and Designing Havana: Republican, Socialist, and Global Spaces," *Cities,* 23, no. 2, 85–98. Examines how aspects of Havana's built environment can be read as a window to past influences from the United States, the Soviet Union, and Spain, as well as to Cuba's own creative styles.

Lattes, Alfredo E., Jorge Rodríguez, and Miguel Villa. 2004. "Population Dynamics and Urbanization in Latin America: Concepts and Data Limitations." In Tony Champion and Graeme Hugo, eds., *New Forms of Urbanization: Beyond the Urban-Rural Dichotomy,* London: Ashgate, 89–111.

Potter, Robert, and Dennis Conway. 1997. *Self-Help Housing, the Poor, and the State in the Caribbean.* Knoxville: University of Tennessee Press. A case study of the ongoing tensions between state commitment to basic social services and the pressure that the urban poor exert to extract concessions from the state.

Rajewski, Brian, ed. 2002. *Cities of the World, Vol. 2: The Western Hemisphere,* 6th ed. Farmington Hills, MI: Thomson Gale. Presents profiles of large and medium-sized cities.

Richardson, Bonham. 1994. *Igniting the Caribbean's Past: Fire in British West Indian History.* Chapel Hill: University of North Carolina Press. Historical review of the use of fire throughout the Caribbean; slave rebellions, urban arson, and field clearing carry important implications for landscape modification and for pressuring elites into concessions.

Scarpaci, Joseph L., Roberto Segre, and Mario Coyula. 2002. *Havana: Two Faces of the Antillean Metropolis.* Chapel Hill and London: University of North Carolina Press. Reviews 500 years of urbanization and Havana's spatial configuration as a mirror to periods of economic development, political control, and architectural imprint.

Scarpaci, Joseph. 2005 *Plazas and Barrios: Heritage Tourism and Globalization in the Latin American Centro Histórico.* Tucson: University of Arizona Press. Referencing nine historical districts, this study covers, in the context of globalization, the rise of heritage tourism as an alternative to mass, Cancún-like, venues.