GLOBAL OUTLOOK

The Globalization Index

A.T. Kearney, Inc., *Foreign Policy* Magazine, and the Carnegie Endowment for International Peace

"**W**hen you can measure what you are speaking about, and express it in numbers, you know something about it," the British physicist Lord Kelvin once observed. "But when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meagre and unsatisfactory kind."

"Unsatisfactory" is the word that best describes the contemporary debate over globalization. There seems to be a consensus that globalization—whether economic, political, cultural, or environmental—is defined by increasing levels of interdependence over vast distances. But few people have undertaken the task of actually trying to measure those levels of interdependence. For instance, how do we determine the extent to which a country has become embedded within the global economy? How do we demonstrate that globalization is racing ahead, rather than just limping along? And how do we know just how worldwide the World Wide Web has become?

Like the physical universe that Lord Kelvin sought to understand, globalization may be too vast a concept to be fully captured by today's still limited set of statistical measurements. But that same challenge has not deterred physicists from their relentless pursuit to measure with ever greater accuracy the forces that hold the universe together. Nor

The Global Top 20

Singapore leads the rankings as the most global nation in the index, due in large part to its high trade levels, heavy international telephone traffic, and steady stream of international travelers. European nations round out the rest of the top five countries. Despite high levels of integration on various technological measures, the United States remains less integrated in economic terms, leaving it twelfth in the index.
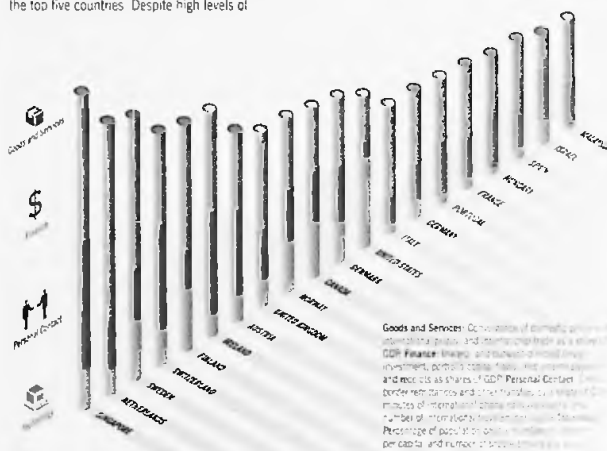
Woodrow Wilson International Center for Scholars

US Department of Housing and Urban Development

WHAT'S INSIDE

Message from Wilson Center Director Lee H. Hamilton

The Woodrow Wilson International Center for Scholars is pleased to co-publish, together with the United States Department of Housing and Urban Development (HUD), our second issue of *Global Outlook*.

We welcome HUD Secretary Mel Martinez as our new partner in this effort to highlight important urban research and best practices from nations, regions, cities, and communities throughout the world. Secretary Martinez served as the elected Chairman of Orange County, Florida. In that capacity, he was the chief executive of a county government that includes within its boundaries the City of Orlando, Disney World, and nearly one million residents. The rapid growth of Orange County and its surrounding metropolitan region in central Florida made Chairman Martinez the ideal public official to be appointed by Governor Jeb Bush as Chairman of the State of Florida's Growth Management Study Commission. Growth management is a major issue for urban areas both in the United States and around the world, and, thus, in this issue of *Global Outlook*, we reprint a portion of the final report of Florida's Growth Management Study Commission produced under Secretary Martinez' leadership.

Another major theme addressed in this issue is economic development and quality of life in developing nations. Here we highlight the important work of the United Nations Centre for Human Settlements (Habitat) and the upcoming "Istanbul + 5" meeting in New York to move forward on measures to eliminate global urban poverty. Our previous issue included an article from the World Bank on the Cities Alliance, an important new partnership in the battle to end poverty and deprivation. This issue contains related thematic articles on the "Making Cities Work" initiative of the U.S. Agency for International Development, the Summit of the Americas, Fannie Mae's important international activities to promote new financing mechanisms for affordable home-ownership, and the World Bank's commendable efforts to help reform property rights in Peru and expand access to formal credit markets for low-income families.

This issue also places emphasis on the rapidly accelerating impacts of new information technology and telecommunications on urban areas. One article explains the new "Globalization Index" from A.T. Kearney and the Carnegie Endowment for International Peace, publisher of *Foreign Policy* magazine. In a closely related article, Wilson Center Senior Policy Scholar Leslie Simon reviews Internet policy and digital development in Malaysia and Africa, excerpted from his newly published Wilson Center book, *NetPolicy.Com*. Additional articles that touch on aspects of the technology and New Economy themes include Mario Pezzini's analysis of regional territorial policies in the Organization for Economic Cooperation and Development, Joel Kotkin and Ross DeVol's Milken Institute study of knowledge-value cities in the digital age, and work by the United Nations, governments, and universities applying Geographic Information Systems (GIS) to addressing urban challenges.

Finally, this issue takes a hard look at the role of non-governmental organizations and citizen participation in urban development, with articles by Aprodicio Laquian on metropolitan planning in the Philippines, Marc Weiss on community development corporations in the United States, and Douglas Spiro on international grassroots action to promote interracial and intergenerational healing.

The Woodrow Wilson Center is delighted to forward to you this second issue of *Global Outlook* •

Florida's Growth Management Study Commission: Preparing Livable Communities and Regions for the New Economy

MEL MARTINEZ
U.S. Department of Housing and Urban Development

Editors' Note: U.S. Housing and Urban Development Secretary Mel Martinez served as the Chairman of the State of Florida's Growth Management Study Commission, which released its final report on February 15, 2001. The following is an excerpt from the report.

TIME FOR BOLD CHANGE

This Commission believes that it is the State's highest priority to achieve a diverse, healthy, vibrant and sustainable economy. By promoting a climate which provides economic stability, maximizes job opportunities and increases income for its workforce, Florida will be in the best fiscal position to address the other major challenges of our State which are education, infrastructure, the environment, public safety and social services. Our proposed reforms for growth management have been guided by this principle. For more than 25 years, Florida has tried various legislative approaches to address the stresses of our State's rapid growth. These efforts resulted in a mandate to create a vertically integrated, state, regional and local comprehensive planning system. As a result of landmark legislation passed 15 years ago, all 472 local governments in Florida have adopted comprehensive plans that attempt to address the community's current and future plans for land use, natural resource protection and provision of infrastructure. These mandates raised the minimum bar for planning efforts in this State, and have produced some significant positive results.

Yet, these prior efforts have fallen short of our collective aspirations, and some requirements, such as traffic concurrency, had unintended negative effects. We agree with the assessment in the Executive Order establishing this Commission, that although the processes established by these laws were well intended, the quality of growth has not met our expectations, the strains on infrastructure have been only marginally reduced and, in essence, we have created a more complicated, more costly process without the expected corresponding benefits. Traffic congestion, school overcrowding, loss of natural resources, decline of urban areas and conversion of lands without adequate infrastructure are, despite our laws, growing problems throughout the State.

There is a tendency to equate new development as the only cause of growth-related problems, rather than to recognize that new development is a free market way of accommodating the demands of our State's rapid population and economic growth. We cannot continue to erroneously conclude that techniques that target only the effects (development) will somehow change the root cause (population growth), and that

a regulatory framework applied on a project- by-project level, will be more effective than a broad and innovative incentive-based approach, coupled with new sources of revenues. This is one reason why the "concurrency" model has failed to meet our needs.

Although information presented to the Commission demonstrates some successes in our current system, we can and must do a better job of managing our growth than we have in the past. We have reviewed our progress, evaluated the successes and disappointments of our current efforts, those of other states, and our own local governments, and attempted to adapt and evolve them into a program for the new century.

Florida's population growth remains one of the highest in the nation. According to the latest census data, approximately 16 million people currently live in the State. That number is expected to increase by more than 6 million over the next 25 years, and by 8 million in the next 30. Our elderly population is expected to grow at an even faster rate and to comprise over 25 percent of Florida's residents by the year 2025. While our school-age population is expected to be a smaller percentage of the total population by 2025 than at present, the number of school-age children will still expand tremendously over that time period, and is projected to increase sharply around 2020 as the baby boom echo generation's children reach school age. All of the favorable attributes that Florida possesses will assure that population growth will continue at a rate exceeding most of the country, primarily due to immigration. Seasonal population changes and tourism create enormous spikes in demands on community services and facilities. Our economic success and technological progress is likely to increase the demand for housing choices in the future, and our suggested changes acknowledge the fundamental principles of personal choice and property rights.

No system should be immune from change, and our growth management system is no exception. A realistic look at the results of our past efforts, combined with the imperative of still rapid population growth, demand that we seek

should it deter those who seek a deeper understanding of globalization and its impact on the contemporary world. Without some means to quantify the extent of globalization, any meaningful evaluation of its effects will remain elusive.

With this challenge in mind, we present the A.T. Kearney/*Foreign Policy* Magazine Globalization Index™, which offers a comprehensive guide to globalization in 50 developed countries and key emerging markets worldwide. The Globalization Index "reverse-engineers" globalization and breaks it down into its most important component parts. On a country-by-country basis, it quantifies the level of personal contact across national borders by combining data on international travel, international phone calls, and cross-border remittances and other transfers. It charts the World Wide Web by assessing not only its growing number of users, but also the number of Internet hosts and secure servers through which they communicate, find information, and conduct business transactions.

The Globalization Index also measures economic integration. It tracks the movements of goods and services by examining the changing share of international trade in each country's economy, and it measures the permeability of national borders through the convergence of domestic and international prices. The index also tracks the movements of money by tabulating inward- and outward-directed foreign investment and portfolio capital flows, as well as income payments and receipts.

Given the unprecedented range of factors that the Globalization Index encompasses, we believe that it is a unique and powerful tool for understanding the forces shaping today's world. And the results of this year's index prove startling. Much of the conventional wisdom cherished by both champions and critics of globalization collapses under the weight of hard data, ranging from the pace and scale of global integration and the characteristics of the "digital divide" to the impact of globalization on income inequality, democratization, and corruption.

The A.T. Kearney/*Foreign Policy* Magazine Globalization Index™ may not settle the question of whether globalization does more good than harm. But the index provides an objective starting point for a debate that has typically relied more on anecdotal evidence than empirical facts.

LEADERS OF THE PACK

In recent years, indicators of global integration have shown remarkable growth. The number of international travelers and tourists has risen, now averaging almost three million people daily—up from only one million per day in 1980. The latest data from the United Nations Conference on Trade and Development show that foreign direct investment jumped 27 percent in 1999 to reach an all-time high of $865 billion, while total cross-border flows of short- and long-term investments have more than doubled between 1995 and 1999. Due to the falling cost of international telephone calls and the rising levels of cross-border activity, the traffic on international switchboards topped 100 billion minutes for the first time in 2000. And with an online pop-
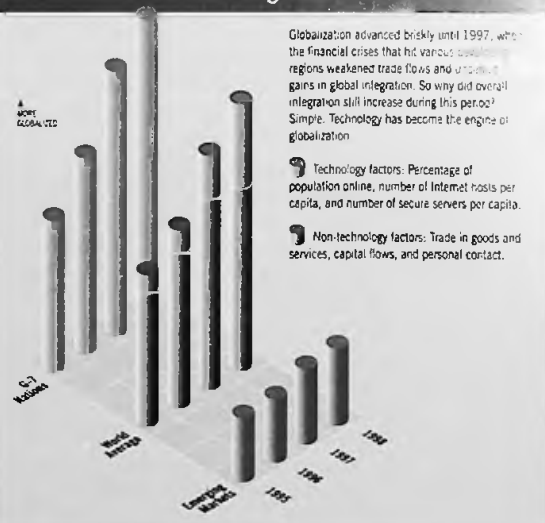
ulation estimated at more than 250 million and growing, more people in more distant places have the opportunity for direct communication than ever before.

The expansion of information technologies adds to globalization in ways other than facilitating communication. Some nations fear that the Internet is an engine driving U.S. cultural hegemony. Others see the Internet as a catalyst for creating global cultural communities, from Moroccan sports enthusiasts rooting for their favorite Canadian ice hockey team to anti-globalization protestors mobilizing against the World Trade Organization and the International Monetary Fund. The Internet also is an unprecedented means for disseminating ideology to a global audience, whether it is pro-democracy activists in Serbia rerouting dissident radio broadcasts to the World Wide Web or Chechen rebels maintaining their own online news service.

The full impact of information technologies on political and social life is not easily measured. But it is possible to gauge their effects on the economic sector. Information technologies make it possible for nations to sustain levels of economic integration with one another. Nowhere is this integration more evident than in financial markets, which use advanced information technology to move $1.5 trillion around the world every day. For the United States, cross-border flows of bonds and equities are now 54 times higher now than they were in 1970. Such flows have multiplied by 55 times for Japan and 60 times for Germany.

At first glance, these trends lend credence to the popular notion that globalization is fast creating a world that, as former Citicorp Chairman Walter Wriston put it, is "tied together in a single electronic market moving at the speed of light." But a closer look reveals that global integration appears to be growing no more rapidly now than it has been for years, and its pace may even be slowing down.

Is Globalization Slowing Down?

Globalization advanced briskly until 1997, when the financial crises that hit various regions weakened trade flows and undercut gains in global integration. So why did overall integration still increase during this period? Simple. Technology has become the engine of globalization.

Technology factors: Percentage of population online, number of Internet hosts per capita, and number of secure servers per capita.

Non-technology factors: Trade in goods and services, capital flows, and personal contact.

Why does globalization remain sluggish even as indicators of technological integration—the number of Internet hosts, online users, and secure servers—continue to grow exponentially? The data from our broad spectrum of developed and developing markets suggest that global economic integration has wound down to something of a crawl. The drop in total trade to and from the 50 countries surveyed weighs particularly heavy in this slowdown. The chief culprit was the series of financial crises that rippled through Southeast Asia, Latin America, and Russia in the late 1990s. Strong growth in portfolio investments and foreign direct investment helped to moderate these declines, and the value of world trade has rebounded since 1999. As a result, we see a situation in which economic globalization slowed even as technological globalization continued at a rapid clip.

Some nations have pursued integration with the rest of the world more aggressively than others. The most globalized countries are small nations for which openness allows access to goods, services, and capital that cannot be produced at home. In some cases, geography has played an important role in sustaining integrated markets. The Netherlands, for instance, benefits from (among many other fa[...] its position at the head of the Rhine, which knits to[...] countries that account for almost three quarte[...] Dutch trade. In other cases, such as Swede[...] [Switz]erland, relatively small domestic markets and hig[...] [skill]ed workers have given rise to truly global con[...] [capa]ble of competing anywhere in the world. And a [...] [oth]er factors has contributed to the globalizatio[...] [sm]all states. Austria, for example, benefits from [...] and tourism, while remittances from large p[...] [l]iving abroad contribute to Ireland's integration [...] outside world.

Sing[...] [stan]ds out clearly as the world's most global countr[...] [This] country far outdistances its nearest rivals in terms [...] border contact between people, with per capita in[...] outgoing telephone traffic totaling nearly 390 minutes per year. Singapore also boasts a steady stream of international travelers, equal to three times its total population. In contrast, the United States hosts only one-sixth that level of international tourists and travelers and can claim less than one-fourth the per capita outgoing international telephone traffic.

Yet in recent years, Singapore has struggled to maintain high levels of trade, foreign investment, and portfolio investment, which help support its globalization lead. The Asian "flu" is partly to blame, since the financial crisis undermined the entire region's economic performance. But Singapore's slow progress in privatizing state industries, its failure to win endorsement for a regional free-trade agreement, and its tight controls over Internet development have also slowed its integration with other countries.

Another country that ranks high on the Globalization Index is the Netherlands. But here, the story is largely economic. Within only a few short years, the Dutch have both invested heavily in other countries and seen foreign participation in their own economy rise to levels that few other

Digital Divides

An overwhelming majority of economic activity linked to information and communications technology is concentrated in the industrialized world, with developing nations lagging far behind. But there is also a divide within the divide, with the United States, Canada, and the Scandinavian countries far outpacing most West European economies.
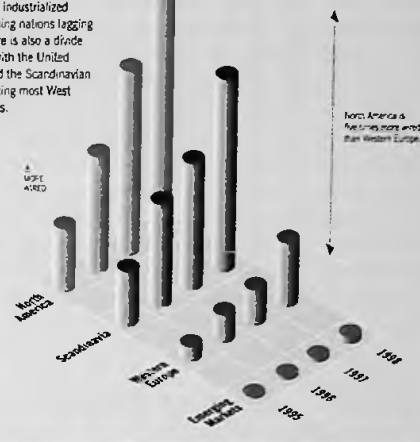
nations have been willing or able to sustain. In the wake of aggressive reforms that have stripped regulations and enhanced labor flexibility, foreign investment increased from 8 percent of gross domestic product (GDP) in 1995 to more than 19 percent of GDP in 1998. Likewise, portfolio investments grew from only 5 percent to more than 30 percent over the same period, the highest levels in the world—more than double those in France and Germany and 5 times higher than those in the United Kingdom.

With Sweden and Finland riding the wave of Internet development to similar gains in integration with the rest of the world, the current globalization rankings may well be in flux. Singapore could slip from the lead in the coming years, as countries that are better positioned to benefit from global communications technologies or that are more aggressive about reforms to attract foreign trade and investment develop stronger ties with their neighbors.

Yet despite signs of greater openness among these few leading countries, many others remain stalled at much lower levels of integration, with little indication of imminent change. Thus, there is reason to believe that the countries at the top of the rankings are only running further and further away from the pack.

THE DIGITAL ABYSS
Not all countries around the world have participated equally in the transition to the new global economy. The digital divide between developed and emerging-market countries is now more like a digital abyss. On many relevant measures—from the diffusion of Internet users to the number of Internet hosts—the vast majority of economic activity related to information and communications technologies is concentrated in the industrialized world.

But among industrialized countries, another digital divide exists. The Internet has penetrated deeply in the United States, with neighboring Canada not far behind. In both countries, over 25 percent of the population enjoyed Internet access by 1998 (the last year for which data are available for all countries in the survey). More recent estimates put that number above 40 percent in both countries. Perhaps more important, the United States and Canada lead the world in secure servers suitable for electronic commerce, signifying that their well-developed Internet networks can be used effectively to enhance commercial activities as well as personal communication.

In addition to the United States and Canada, Scandinavian countries also rank among the world's most wired nations. Thirty-nine percent of Sweden's population was online in 1998, growing to 44 percent in more recent surveys. Finland and Norway led in Internet hosts, each with more than 70 servers per 1,000 inhabitants connected directly to the World Wide Web.

Indeed, if any region of the world exemplifies the changing face of global integration, that region is Scandinavia, where Sweden, Finland, and Norway have turned their traditional engineering and manufacturing prowess to work in the information technology boom while further opening their countries to trade and investment flows.

Scandinavia's technological takeoff should come as little surprise. In the last century, Sweden was among the first countries to realize the full potential of the telephone. It offered a means of mitigating distance in often sparsely populated lands. Thirty years ago, Sweden's leading technology company, Ericsson, was among the pioneers in mobile telephony, and this decade the country has embraced Internet technologies far ahead of the curve. Stockholm, with nearly 60 percent of its population online, is perhaps the most wired city in the world.

In similar ways, neighboring Finland suggests the possibilities of this Internet-led revolution. In 1995, Finland topped all others in terms of Internet access. Information technology made it possible for Finnish companies to respond to competitive pressures by diversifying both their export markets and their workforce. Recent studies show that over one quarter of Finnish exports now go to countries beyond Europe, up from less than one fifth in 1990. And nearly half the staff of Finland's 30 largest companies now operate overseas, as compared to only 15 percent in 1983. Although other countries have since pulled ahead in levels of Internet penetration, Finland has witnessed rising levels of trade and investment that have pushed it into the fifth position overall in the Globalization Index, much higher than it would have placed only a few years ago. One other

Globalization and Inequality

Are more globalized societies also more unequal? Not necessarily. With some exceptions, countries scoring high in the Globalization Index enjoy more egalitarian income patterns, while nations that are less integrated with the rest of the world display more skewed distributions of income.*

*Inequality data are not available for all countries in the survey.
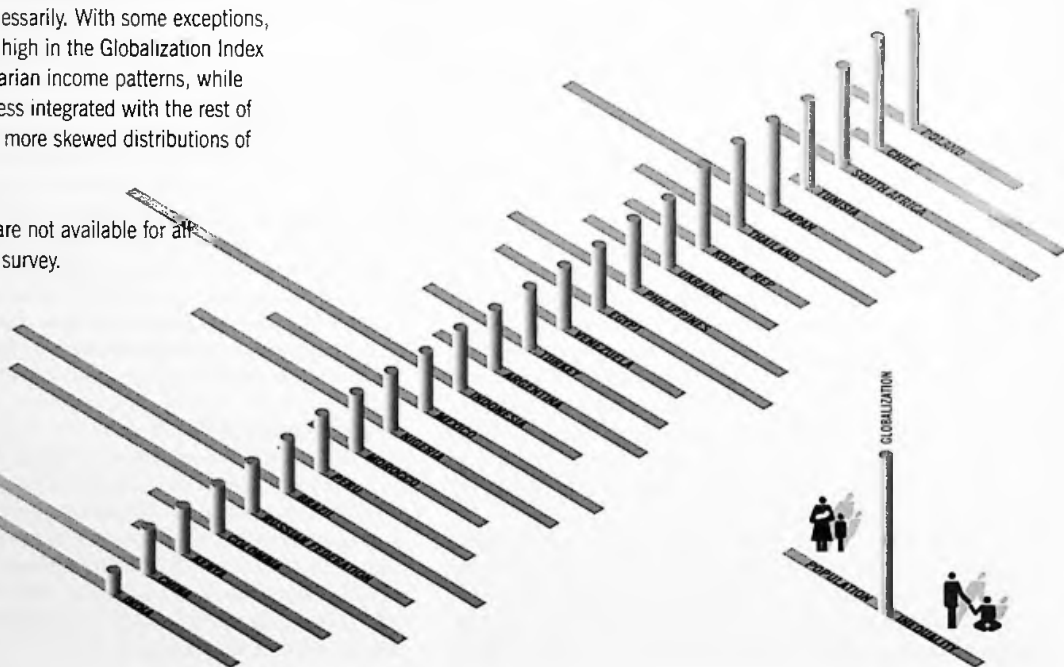
symbol of success: The market capitalization of Nokia, Finland's global telecommunications giant, is now higher than the country's gross domestic product.

The fact that Sweden, Finland, and the rest of Scandinavia have been able to nurture fast-moving technological developments with their traditionally lumbering regulatory and tax regimes offers an unexpected contradiction, confusing traditional assumptions about how high levels of regulation impede globalization. But what about areas of relatively high regulation where no technological takeoff has yet been achieved? Look no further than continental Europe to see the negative effects of an unfavorable business climate on integration. Indeed, most of the countries in the Euro zone, weighed down by their relatively low scores in Internet development, rank at the bottom of the top 20 globalized countries.

Globalization and Inequality
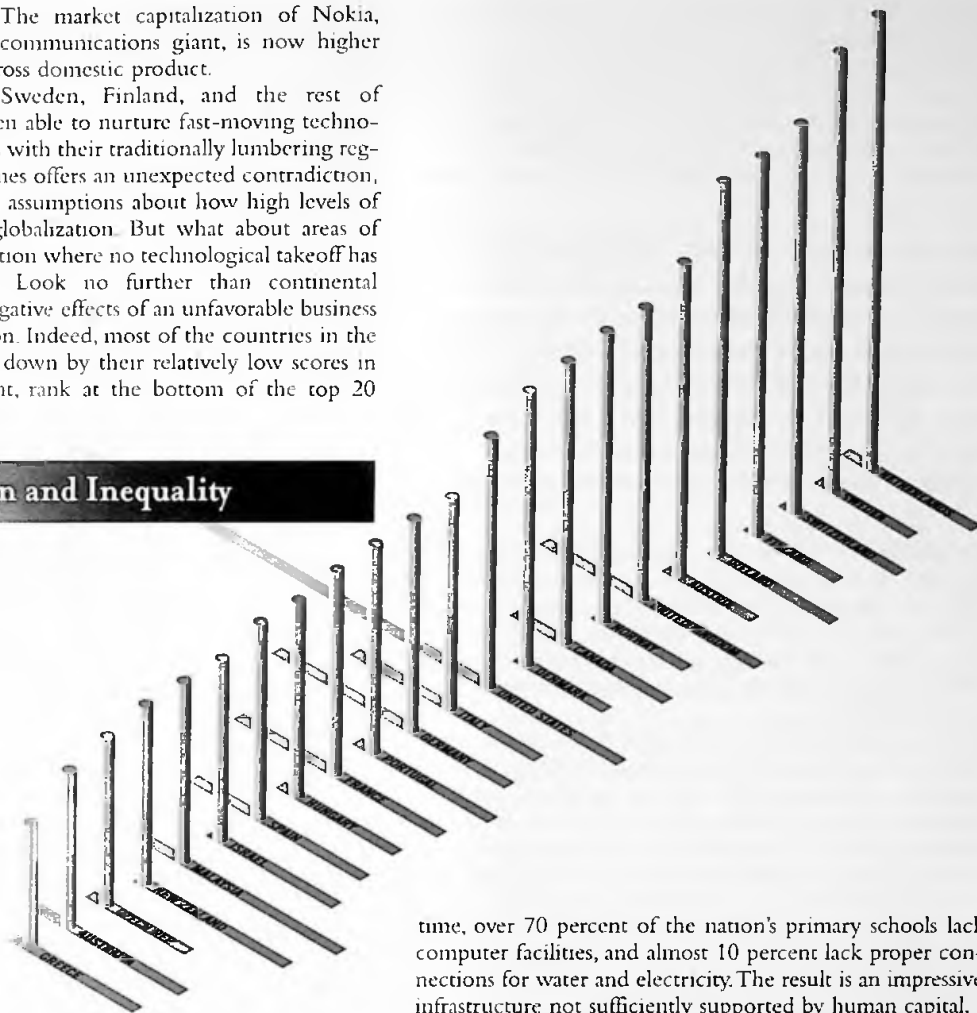
Concerns about the disparities between industrialized and developing countries, especially with respect to Internet access and use, have touched off a worldwide debate about the global digital divide. Rather than a division between developed and developing countries, however, the divide at this moment reflects the vast technological advances in North America and the Scandinavian countries compared with the rest of the world. Together, those two regions stand on one side of a gaping digital chasm that appears to have left much of the remaining world behind.

If this "digital abyss" is to be bridged, developing nations have the most ground to cover. But deciding how to use their limited resources poses a difficult dilemma. Malaysia offers but one example of the perverse choices that can ensue. In an effort to attract investment and develop its high-technology capabilities, Malaysia has spent more than $3.6 billion on its Multimedia Super Corridor. At the same time, over 70 percent of the nation's primary schools lack computer facilities, and almost 10 percent lack proper connections for water and electricity. The result is an impressive infrastructure not sufficiently supported by human capital.

For other countries, Internet development cannot proceed unless more fundamental concerns about infrastructure are addressed. In Chile, one of the most prosperous emerging markets, 57 percent of the fixed telephone lines and 58 percent of the mobile-phone subscribers are located in the capital city, leaving most of the country without Internet access. And Africa's underdeveloped telecommunications sector has left much of that continent without reliable connections to the World Wide Web. For instance, the Democratic Republic of the Congo still has no direct link to the Internet, and a large number of African countries can count no more than a few hundred active Internet users.

MORE EQUAL THAN OTHERS
Anti-globalization critics frequently claim that globalization increases income inequality. This assertion is elegant in its simplicity, but it ignores a host of other important factors. The level of income disparity in an economy might have more to do with history, economic growth, price and wage

controls, welfare programs, and education policies than it does with globalization or trade liberalization.

Moreover, the empirical evidence suggests a very different story about income disparity and globalization. Emerging-market countries that are highly globalized (such as Poland, Israel, the Czech Republic, and Hungary) exhibit a much more egalitarian distribution of income than

But the general pattern of higher globalization and greater income equality holds for most countries, both in mature economies and emerging markets. These findings should reinvigorate the debate over whether countries are poor and unequal because of globalization, or because they are not globalized enough.

emerging-market nations that rank near the bottom of the Globalization Index (such as Russia, China, and Argentina). There are some exceptions: Malaysia, for instance, is more globalized but less equal than Poland. But the general pattern of higher globalization and greater income equality holds for most countries, both in mature economies and emerging markets.

These findings should reinvigorate the debate over whether countries are poor and unequal because of globalization, or because they are not globalized enough. Moreover, efforts to redress global inequality should be tempered with the recognition that many countries with skewed income distribution patterns, including Brazil and Nigeria, also have large populations. That only underscores the difficulty of pulling the mass of humanity out of poverty.

A CAT SCAN OF GLOBALIZATION

Trade, foreign direct investment, international telephone calls, Internet servers—considered individually, statistics on each of these phenomena are accurate, albeit insufficient, measures of global interdependence. Yet, just as a cat scan creates a three-dimensional image of the human anatomy from a series of two-dimensional images, the A.T. Kearney/*Foreign Policy* Magazine Globalization Index™ provides a comprehensive view of global integration through an analysis of its component parts.

There is, of course, an irony associated with trying to measure globalization on a nation-by-nation basis. Even the least integrated countries are being drawn together by new forces beyond their ability to control, whether it is global warming, the spread of infectious diseases, or the rise of transnational crime. And some of the most significant aspects

Globalization Index Methodology and Data Sources

Foreign Policy Magazine produces the Globalization Index in collaboration with A.T. Kearney's Global Business Policy Council. The Council is a strategic service of A.T. Kearney, an EDS company. The A.T. Kearney/*Foreign Policy* Magazine Globalization Index™ encompasses several key indicators: globalization in goods and services is measured through the share of international trade (exports of goods and services plus imports of goods and services) in gross domestic product (GDP), as well as the convergence of domestic prices and world prices. Financial globalization is measured through income payments and receipts, the inflow and outflow of foreign direct investment, and the inflow and outflow of portfolio capital, all measured as a share of GDP. The globalization of personal contact is measured with international tourists and travelers as a share of population, minutes of incoming and outgoing international phone calls per capita, and transfer payments and receipts as a share of GDP. Finally, three elements comprise the Internet connectivity indicator—the number of Internet users, the number of Internet hosts, and the number of secure servers, all measured on per capita basis.

The most recent available data were collected from a number of international sources, including the World Bank's World Development Indicators 200 (Washington: World Bank, 2000), the International Monetary Fund's International Financial Statistics Yearbook (Washington: International Monetary Fund 2000), the International Telecommunication Union Yearbook of Statistics 2000 (Geneva: International Telecommunication Union, 2000), and the Secure Server Survey, available online from Netcraft.

For links to relevant Web sites, go to www.foreignpolicy.com.

of globalization—the spread of culture and ideas—cannot be easily quantified. These and other challenges highlight the need for a closer and more refined examination of the forces driving global integration, not to mention further refinement of the tools used to measure it. •

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to improve upon our past efforts at growth management. Local governments and their citizens must have the tools and the assistance to accommodate these changes while retaining or regaining their sense of community. Improved processes are only part of the future. Technology has created tools for better governmental decision-making that are both remarkable and easily accessible. Data on population composition and growth, economic forecasting, computer-based resource mapping, and visual graphics, among others, all are new tools that allow communities to visualize and measure the impacts of alternative growth proposals. Not only do these tools bring a remarkable wealth of information to the fingertips of local government decision-makers, but they also make the information much more accessible to citizens who wish to participate in the process.

While technology has changed the way we live and work, people are the essence of a community. The current system relies too heavily on litigation to resolve disputes between citizens, and between citizens and their governments. We must create and take advantage of opportunities for earlier citizen participation in a community's planning if we are to build the necessary consensus to make healthy and livable communities.

In addition, many local governments have sophisticated planning staffs and have already produced innovative and creative solutions to local problems. However, these same governments have chafed under the rote requirements of the current law and found their time and money diverted to achieve compliance with requirements which have had little positive impact on their local planning efforts. While complex mandates may have been necessary to bring us to this point in our local planning efforts, it is time to turn our attention to achieving quality planning resulting in livable communities. We believe in order to reach this goal, the State must refocus its efforts on a more incentive-based approach to planning and a more effective regulatory program targeted on limited, critical State issues while shifting its primary role from a regulator to a partner of local government. Likewise, local governments must be given the tools and economic incentives to bring their plans to the level of quality and accountability that the citizens of Florida seek. Local plans should be adaptive and evolutionary in nature, allowing a diversity in neighborhood design, responsive to our population's changing needs and desires.

Although a livable community does not consist solely of good roads, water, sewer and bandwidth capacity, these amenities are basic to our health and quality of life. Infrastructure planning and funding is one of the glaring deficiencies in our current planning system. The current system envisioned infrastructure keeping pace with population growth, but our roads and schools, in particular, are increasingly overburdened. Our growth management systems do not fully integrate with school planning and have never attempted to include planning for the critical government services of police and fire protection, much less forecast the need for operation and maintenance of infrastructure. By failing to address the true costs of

FLORIDA

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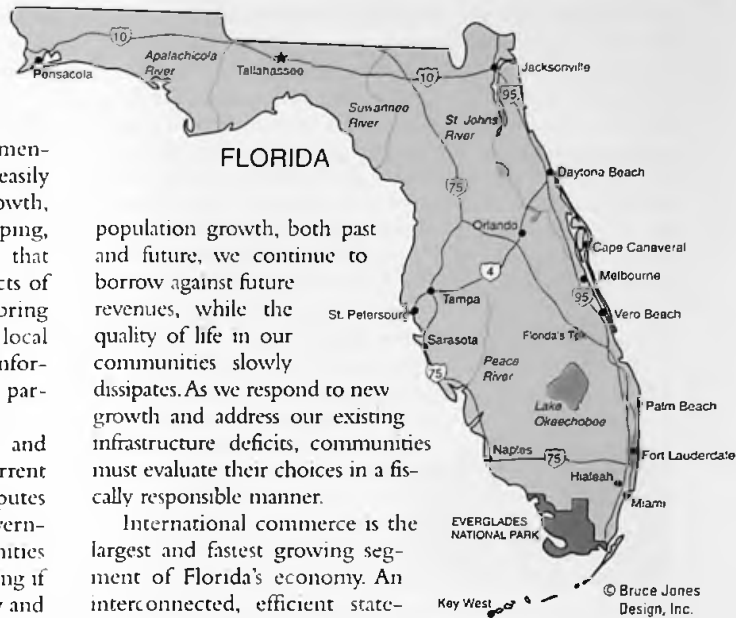
population growth, both past and future, we continue to borrow against future revenues, while the quality of life in our communities slowly dissipates. As we respond to new growth and address our existing infrastructure deficits, communities must evaluate their choices in a fiscally responsible manner.

International commerce is the largest and fastest growing segment of Florida's economy. An interconnected, efficient statewide transportation system is the essential component for Florida's seaports and airports to provide for the timely and cost-effective movement of goods and passengers. The more efficient this movement, the more competitive Florida is in the global marketplace; the more competitive, the greater the creation of jobs and economic opportunity, yielding a growing, healthy economy.

We do have a great opportunity to make a real difference in the livability of our communities for all citizens. It will take more disciplined use of our dollars and prioritizing of activities, both state and local. If we are to succeed, to keep a thriving economy and preserve the precious natural resources and communities that we have, we must engage the creative and collaborative efforts of many more of the residents of our communities. Real change is within our grasp if we have the courage to realistically face our challenges together.

A LIVABLE FLORIDA FOR TODAY AND TOMORROW

Preparing Florida for the New Economy

A. Where we are today

Under Florida's Growth Management Act, each local government is required to provide for adequate facilities to support growth. If facilities are not available, concurrency requires that new development to accommodate growth must be denied. Local governments are required to adopt level of service standards for application of concurrency to six types of public facilities: potable water, sanitary sewer, drainage, parks, solid waste, and transportation. School concurrency is an option available for local governments.

The infrastructure planning and management system has three parts. First, comprehensive plans are to match future land uses with public facility plans designed to accommodate

the anticipated growth at acceptable levels of service. Five-year capital improvement plans are to forecast the demand for public facilities, identify and schedule necessary improvements, and support the improvements with available funding. Second, a financially feasible capital improvement schedule which assures that level of service standards will be achieved and maintained is to be adopted and updated annually. Third, the regulatory application of concurrency occurs through the local government's concurrency management system at the time of permitting. If capacity is not available, development is not to proceed. Several special exceptions have been adopted for transportation concurrency to allow greater flexibility in urban infill and redevelopment areas.

By the time these requirements were put into place, infrastructure backlogs throughout Florida were dauntingly large and the State did not create new financial resources to address these backlogs. Sources of revenue to address these deficiencies were inadequate then and remain so today. Additionally, Florida's progress has increased our per capita demand for infrastructure. In spite of existing policies, today many local governments have not adequately addressed their infrastructure demands, particularly in the area of schools and transportation facilities. For many reasons, at both the State and local level, revenues have not been allocated to meet the infrastructure requirements of a burgeoning population. Despite the requirements of current law, there still does not exist a good linkage between future land use plans and infrastructure planning and budgeting. Concurrency is an inadequate tool for managing growth. The fundamental flaw of concurrency is the presumption that population growth can somehow be controlled by the regulation of land development activities on a project-by-project basis. At best, it keeps a problem with overburdened infrastructure from becoming exacerbated in one location while encouraging growth in other areas with excess capacity as measured by adopted level of service indexes. Over time, this system creates two unintended results: sprawl, as new residents and therefore new developments seek locations without infrastructure deficiencies; and ultimately, the restriction of supply of new development to accommodate population growth, which may drive up costs. Nothing in our system adequately addresses the long-term operation and maintenance costs of existing substandard infrastructure.

While traffic concurrency has some appropriate flexibility, the exemptions are cumbersome to implement, thus discouraging development in urbanized areas where communities might realize economies of scale for other infrastructure and other benefits of thriving urban areas. Concurrency is also required for only certain types of infrastructure and it does not apply to many government services which are impacted by population growth. School concurrency is so difficult to implement that few local governments have yet successfully done so.

Our local land use decisions around the state must be better informed by the knowledge of all relevant capital costs, operation and maintenance expenses, and the available revenues to support them. The future health of our economy as a State and of the livability of our communities depends on whether we realistically address these needs. To ignore them continually borrows against the future.

The proposals that follow are intended to shine a light on the fiscal impacts of our land use decisions in a way that is easily understood by decision-makers and the citizens they serve. This new light will be uncomfortable at times, but not only should it force some difficult decisions on revenue sources and allocation, but it also should force some realism into the cost side of the equation. It is not intended to push all the costs of building our infrastructure on new development because we acknowledge the deficits we are experiencing today are community-wide responsibilities which should not be pushed unfairly onto new housing. To enable us to address the backlog in infrastructure, we suggest increased flexibility in local revenue sources and targeting of State aid to local governments. Gaining the revenues to support the costs of new development is a local decision, but one that must identify the necessary resources to meet the expenses generated at the time new development is approved.

B. Where we need to go.

Florida may already be the most livable State in our nation. Its natural beauty and comfortable climate make it an ideal landscape in which to live, work and play.

Our goal is to keep it that way.

Keeping Florida *"Florida"* does not mean that we should be promoting policies that would restrict its inevitable growth, or that we should try to hold Florida back from reaching its full potential. Quite the contrary. We believe in Florida. It has every natural advantage that makes it more than reasonably possible that it can always be the same wonderful place—to raise a family, to start a new business, to retire—that it is today.

We need to mindfully protect Florida's most compelling natural assets while proactively promoting the development of strategic and civic infrastructure. To do so, we need to be smarter and more focused in our growth management goals. The policies described in this section attempt to define a process for a more effective statewide growth management policy that:

- Encourages the development of strategic infrastructure;

- Ensures that new growth "pays for itself;"

- Identifies the current infrastructure deficit and promotes measures to address the backlog;

- Links policies for urban revitalization and rural economic development with community planning, regional cooperation, and infrastructure development strategies; and,

- Prepares Florida for the New Economy and promotes high quality of life. •

Mel Martinez is Secretary of the U.S. Department of Housing and Urban Development in Washington, DC. He previously served as a countywide elected official in Florida—Chairman of Orange County—and as Chairman of the State of Florida's Growth Management Study Commission.

Istanbul + 5: The United Nations Centre for Human Settlements (Habitat) and the Global Fight to Eliminate Urban Poverty

ANNA KAJUMULO TIBAIJUKA
The United Nations

Editors' Note: Secretary-General Kofi Annan appointed Dr. Anna Kajumulo Tibaijuka as Executive Director of the United Nations Centre for Human Settlements—UNCHS (Habitat)—in July 2000. Upon assuming responsibility as head of the Centre in Nairobi, Kenya on September 13, her first action was to support the Secretary-General's call to action to realize the goals set out in the Millennium Declaration. "With over half of humanity already living in cities and towns and the increasing urbanization of poverty," she said, "the work of Habitat, as the agency responsible for human settlements, will be critical if the number of people living in extreme poverty is to be halved by 2015 and if the lives of at least 100 million slum dwellers are to be improved by 2020." One of the main items on her agenda in the coming months is the preparation for the special session of the General Assembly for an overall review and appraisal of the implementation of the Habitat Agenda—Istanbul +5—to be held at the United Nations headquarters in New York City during June of 2001.

The *UN Chronicle* recently interviewed Dr. Tibaijuka. What follows are excerpts from that conversation, reprinted with permission.

ON THE PRIORITIES FOR HABITAT

I myself have lived through the various processes of human settlement problems, coming from a village to a rural township to a city. This experience gives me a particular perspective on the aims of the agency. Thanks to the Executive Director of the United Nations Environment Programme (UNEP), Klaus Toepfer, who, as Acting Executive Director of Habitat, has overseen the agency's reform and revitalization over the past two years, I am inheriting a strengthened organization. With the restructuring now complete, I will continue to consolidate the areas that need further strengthening: stabilizing sources of funding and support, but also refocusing some of its programs, linking them with other agencies working in urban areas and particularly improving human settlements. In preparing for the Istanbul +5 review, we are taking stock of our campaigns, especially the global settlement strategy. We will try to see where we succeeded and where we failed, understand the reasons, and improve upon the strategies. I think the Istanbul +5 process therefore provides us with opportunities to revisit and improve our basic targets. The problems of human settlements, development, and the environment are closely linked, and I look forward to establishing a fruitful and productive partnership with UNEP and other UN agencies to further our common agendas. We must also work more closely with governments, municipalities and other local actors.

ON THE FUTURE OF HUMAN SETTLEMENTS

In the twenty-first century, the majority of the world's population is headed for cities, many of which already are overpopulated. This is our major challenge in human settlements. The environmental future of the planet is closely linked to how we manage human settlements and their demand for resources. Cities all over the world share this common agenda, and it is important for us to create links between the cities of the north and the south to solve the problems of urbanization. We all face city problems. But in the developing countries, these are more acute and the possibilities to solve them without international solidarity are limited. With our headquarters in Nairobi, Kenya, Habitat has a special responsibility to help the African continent. The rapid rate of urbanization in Africa means that most governments and local authorities are struggling to meet rising demands for housing and basic services. However, any resolution to the problems of urbanization in Africa has to address the important role of regional planning and rural-to-urban linkages. So there is definitely a need to focus on programs that assist the developing countries in better managing the urban situation. At the same time, we must also go beyond treating the symptoms of urbanization and tackle the underlying causes of the problem. What we need is a program focusing on the population shifts from rural settlements to urban settlements.

ON THE PROBLEM OF URBAN SLUMS

It is not enough to go into an area and raze the slums. If you don't want another slum to spring up, you have to understand and address the factors which caused the slums in the first place. In other words, we should not work against squatters, but against squatting—that's the difference. But we have to convince the government and local authorities that squatting is the problem. If people settle into an area illegally, then the police evict them by force. But they have to live somewhere. Where will they go but to another slum? That is why we urge governments to broker partnerships with the poor, with the slum dwellers, to solve the problem of squatting. We have to secure tenure—the right to housing, the right to land—for the poor. And that is why we have launched a global campaign for secure tenure.

Lima, Peru

ON THE GLOBAL CAMPAIGN FOR SECURE TENURE

We need to empower the poor. They are often able people who have been disenfranchised—most of them moving from the countryside to an urban ghetto, with the expectation that they will find a better income. We all know that people move not because they are actually better off; they move because they think they will be better off. That expectation induces them to move. And with globalization and the spread of information technology, you cannot tie people to one place. That is why we must solve the problem of broken societies with devastated economies. Otherwise, the pressure to move to western countries in Europe and North America would be too great. People are prepared to move when they come from a second-class economy and where they are second-class citizens. Some may end up worse than they were before leaving their original homes—they might end up in a slum. But you see the "push factor" in the expectations people have, thinking that they will be better off elsewhere.

ON THE GLOBAL CAMPAIGN FOR GOOD URBAN GOVERNANCE

If you don't have a job, it is difficult to pay rent; you will likely soon be homeless. So one thing really leads to another. A second campaign to support the right to secure tenure is needed—a global campaign for good urban governance.

Therefore, we are linking up with poverty reduction programs. We now have developed partnerships with the World Bank which, we hope, can help not only in slum upgrading but also in providing support for these programs. We are cooperating with the International Labour Organization in terms of income-generating activities. Once you have improved and upgraded squatters settlements, how will people be able to pay if they have no income? These are the kinds of challenges facing us and are the focus of our campaigns.

ON THE ROLE OF WOMEN

The right to secure tenure is particularly important for women. In western countries, a legal environment has been created for the security of women in the home, including tenure and land rights. In Africa, however, the woman mostly stays at home, and if something happens, if her husband dies, in some traditional societies the widow will be evicted from her house. Then you find homeless women wandering around on the streets with their children. These are some of the things we are trying to address—the right of women to inherit property, particularly in matrimonial homes where most women are bound to stay in the house. That is also why we are trying to cooperate with the UN Educational, Scientific and Cultural Organization on the question of education, particularly for women, as part of economic empowerment.

ON DEVELOPING PARTNERSHIPS

We try to develop innovative partnerships. In an international climate of decreasing funds for development, the future of Habitat lies in finding innovative ways to provide shelter and services for the poor. We need to support the efforts of the poor, and especially women, in housing themselves. Our role is to work with governments and other partners to ensure basic housing rights, security of tenure and better urban governance as ways of reducing poverty. The Cities Alliance Initiative with the World Bank provides an important model for future activities, and Habitat will continue to help governments and local authorities to build their capacities in developing and managing human settlements. We do not have the kind of money that the World Bank has, and it is not our business to have that kind of money. Our business is to have ideas, vision and strategies. It is also about raising awareness—that too is a form of partnership. Our job is to understand human settlements and to design improvements, and then invite other agencies and donors to come in and help. What matters in the end is that we have made better living developments for people. •

Dr. Anna Kajumulo Tibaijuka is Executive Director of the United Nations Centre for Human Settlements (Habitat) in Nairobi, Kenya.

Knowledge-Value Cities In The Digital Age

JOEL KOTKIN AND ROSS C. DEVOL

The Milken Institute

The revitalization underway in some of America's urban centers represents one of the most important, if surprising, developments of the new millennium. Cities across the country are showing signs of a new dynamism that would have been impossible to imagine only a decade ago.

The origins of this renaissance are at once demographic, economic, and cultural. A growing interest in urban life among young, unattached and well-educated individuals, and middle-aged empty-nesters, constitute one source of urban renewal. Immigration is another, fortifying our cities' traditional role as centers of international trade and commerce in the process. Notably, tourism also has contributed significantly to this rise in urban activity, but perhaps the most salient reason for urban revival comes from the role our cities are playing in the enormous technological revolution now transforming the larger economy.

Until the early 1990s, cities were on the periphery of the technology boom, with the vast majority of technology-driven activity occurring in suburban and even quasi-rural areas. Later in the decade, however, access to the Internet on a mass scale spurred greater demand for entertainment and other creative World Wide Web content. It is here, on the "soft" side of the technological revolution, that the traditional strengths of cities in the arts, marketing, and graphics, have come strongly into play.

As the digital age enters a new and potentially tumultuous phase, urban communities are faced with new challenges and opportunities. The opportunity lies first in appreciating that, although it is in consolidation, the shift to a digital economy is not slowing, but accelerating. Despite the dramatic drop in many technology firms' stock valuations in recent months and the business models of a large number of firms having been proven unsustainable, the trend towards use of the Internet as a communications and business tool remains in place. Many were led to believe that the New Economy was a "dot-com" economy. Certainly, Internet-

Lima, Peru

based business models have an important role to play, but they, by themselves, are not the New Economy.

Knowledge and the innovation capacities of human capital are at the core of the New Economy. The key source of competitive advantage, be it among regions or industries, is its intellectual capital—the knowledge embedded in its people. In the old industrial economy, the accumulation of hard assets determined economic success or failure. Today, the knowledge, skills, experience, and innovation potential of talented individuals has greater value than capital equipment or even capital itself. Talented individuals are highly mobile and can reward those regions that attract them. Likewise, their loss can be punishing. To attain a competitive advantage in the New Economy, urban centers must access, create, and utilize human capital. Cities that tap the knowledge assets in their midst, such as universities and research centers, will benefit from the talent that they attract to fuel local economic growth. Life-long learning and retraining programs will bolster urban economic success, forestalling the creation of a labor force that is "finished at forty." Urban areas that do not continually educate their populations face the prospect of being left behind in the New Economy.

The urban revitalization process is still in its early stages. The first cities to see the full benefit of this transformation are those that held the strongest appeal for artists, creative individuals, and predominately younger, educated people. By the late 1990s, these "first-tier" cities, among them, New York, San Francisco, Boston, Los Angeles, and Chicago, emerged as leaders in the expanding digital economy.

Today these cities have burgeoning "cyber districts" that have transformed large blocks of formerly destitute warehousing and manufacturing space into highly desirable post-industrial hubs. In many cases, these districts have become knowledge-value neighborhoods with strong residential, retail, and

Spread of Products to a Quarter of the U.S. Population

Product	Year Invented	Years to Spread
Electricity	1873	46
Telephone	1876	35
Automobile	1886	55
Airplane	1903	64
Radio	1906	22
Television	1926	26
Video Tape Recorder	1952	34
Microwave Oven	1953	30
Personal Computer	1975	16
Cellular Telephone	1983	13
Internet	1991	7

Source: Federal Reserve Bank of Dallas

cultural components. Concomitantly, rent for both work and living space has increased markedly in these districts, driving newer firms and workers into adjacent, formerly depressed neighborhoods. Though reduced affordability for housing and traditional manufacturing and warehousing space is one consequence of this new development, growing price pressure and anti-growth sentiment present prospects for choosing from a broader range of urban locations that are only beginning to harvest the opportunities of the digital economy.

Emerging-technology cities, whose populations are near or less than 500,000 persons, offer several advantages to firms, knowledge workers, and entrepreneurs over their first-tier counterparts. These include far lower costs of living, a supportive business environment, and an often concerted effort by local officials and business leaders to lure and nurture new industries.

A knowledge-based economy rests upon two interdependent but distinctively different skill sets. Knowledge generation is contingent upon highly educated and skilled creative people at the pinnacle of the skill continuum, typically found in first-tier urban areas. Knowledge deployment requires widely held quality skills and education in the middle of the skill distribution. A city will have comparative advantage in one or the other area.

Most successful emerging-technology cities will find their comparative advantage in the area of execution competence, but many can position themselves as implementers of innovation. These cities excel in making products or services based upon an infrastructure and supply network that support high value-added, cost-effective production. World-class manufacturers gravitate toward execution cities.

Many cities around the country are trying to become emerging-technology centers and some have made particular progress. Our research identifies several, among them, Reno, Albuquerque, Tulsa, Huntsville, Omaha, and Boise. These centers, for various and often quite unique reasons, are positioning themselves well for the information age, particularly by concentrating on the infrastructure and "blue collar" functions connected with the Internet such as the development of enabling software, customer support, and on-line order fulfillment.

Perhaps the most encouraging phenomenon of this digital revolution has been the movement to yet another kind of urban area—the old industrial center. Once seen as "basket cases," these regions have begun to attract significant investment and growth in their technology-related sectors. Like emerging-technology cities, they offer lower costs than the first-tier urban centers, but often possess an impressive mix of rich architecture, history, cultural activities, institutions of higher education, and well-developed transportation infrastructure. These comeback cities represent perhaps the most dramatic evidence of the potential for urban centers in the information age. Our research identifies several such centers in various stages of recovery, including Baltimore, Oakland, central Dallas, downtown Los Angeles and Hollywood, as well as smaller, old industrial communities like Kingston in New York's Hudson Valley, and Dayton, Ohio.

Technology Company Location Determinants
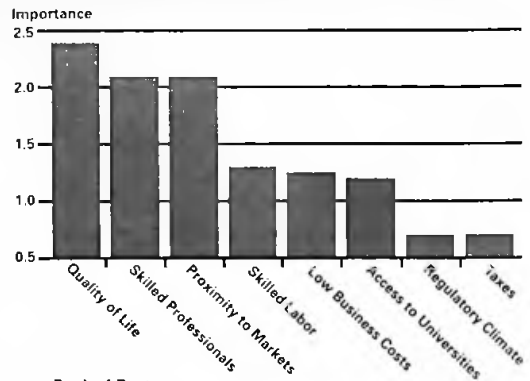
Source: Bank of Boston

The resurgence of these first-tier and emerging-technology cities as urban centers offers many positive examples of revival in older areas. Executing clearly focused policies such as zoning changes to accommodate New Economy companies and "new urbanites," crime reduction, bolstering local education and training, and reinforcing ties with local universities, creates wide-ranging urban recovery. Success also has its downside as evidenced by the pricing-out of traditional industries and working class populations, resulting in the emergence of a "dual city" of rich and poor. As the information revolution spreads and deepens, cities will need to find ways to ameliorate these unintentional consequences of success.

Despite these dilemmas, the digital revolution presents enormous opportunity for urban centers. The imperative for each city is to recognize the attendant challenges and pursue a path toward participation in the New Economy. Urban viability is linked to the extent to which a region can establish local industry clusters that are networked into the global business community.

The paradox of the global technology-based economy is that the enduring competitive advantages lie in location-specific competencies—knowledge, workforce skills, customer and supplier relationships, entrepreneurial infrastructure, and quality-of-place attributes—that allow firms and talent to thrive. In essence, cities are thinking locally to succeed globally. Cognizance of these components will enable municipal economic development and political officials to adjust their strategies accordingly, or risk being left behind. The alternative is a return to the pattern of stagnation and hopelessness that nearly buried America's cities a decade ago. •

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Internet Policy and Digital Development in Malaysia and Africa

LESLIE DAVID SIMON
Woodrow Wilson International Center for Scholars

MALAYSIA'S CYBER-REGION: THE "MULTIMEDIA SUPER CORRIDOR"

Distantly echoing the creation of ultra-modern Brasilia by the Brazilian government in the 1960s, Malaysia has chosen a unique way to make its approach to cyberspace The nation is attempting to create a cyber-region—the "Multimedia Super Corridor," or MSC—as a wedge into the future for the entire nation. The idea of the MSC has been attributed directly to Prime Minister Mahathir Mohammed and has its roots in "The Way Forward—Vision 2020," a paper developed by the prime minister's office and presented to the Malaysian Business Council in 1996. "The Way Forward" expresses the hope that Malaysia will be a "fully developed country by the year 2020" but argues that Malaysia must go its own way. Although it recognizes that the development and application of technology is critical, the paper argues that the nation must deal at the same time with the challenges of preserving its culture and spirituality and deal with its ethnic and racial challenges. From this flows the notion that the information age must be exploited relentlessly for its economic potential but controlled at the outset so that it does not disrupt the social fabric.

Actually begun in 1997, the MSC is 50 kilometers long and 15 kilometers wide and flanked by two new cities: Putrajava is planned to be the government's new electronic administrative center, a key user of new applications developed in the MSC; Cyberjaya will be the site for information technology companies investing in the region A new multimedia university will be built to provide skilled workers, and the overall project is expected to employ 150,000 people

To attract investors, the MSC offers high-technology companies tax-free status for ten years, tax exemptions for equipment, relaxed immigration rules for expatriates, and other economic incentives. In addition, in response to initial concerns by investors, the Malaysian government created a ten-point Multimedia Bill of Guarantees to apply within the corridor, providing for strong intellectual property protection, rights for corporate ownership, freedom from on-line censorship, and other concerns The government also agreed to develop a more comprehensive national framework for electronic commerce, and among the laws drafted or already passed are ones dealing with digital signatures, electronic contracts, computer crime, data protection, and electronic government.

The government also has identified seven application areas that investors would have to work on in order to qualify for economic incentives: electronic government, telemedicine, research and development, remote manufacturing, borderless marketing centers, multimedia funds transfer, and "smart" schooling. By 1998, the government

had also added schools, universities, and company training facilities to the list of institutions that would qualify for MSC status.

Although the Asian financial crisis of the late 1990s slowed the development of the MSC, the government had received 176 applications from companies by early 1998 to locate in the MSC and had approved 103 of them European companies made up the largest number of investors, followed by those from the United States and Japan. This testbed approach to a nation's entry into cyberspace will be interesting to watch. If Malaysia can succeed in building an advanced infrastructure and attracting investment to create jobs, while at the same time preventing cyberspace from affecting other aspects of national life, other nations will attempt the same thing. But the genie of the Internet, once let out, will be difficult to contain.

NATIONAL PROGRESS AND INTERNATIONAL COOPERATION ON THE AFRICAN CONTINENT

At first glance, Africa's entry into the information age would appear to be a pipe dream. As Jay Naidoo, South Africa's Minister of Posts, Telecommunications, and Broadcasting, has pointed out, a few months "before the dawn of the new millennium, we have 14 million telephones in Africa, less than you would find in New York or Tokyo." That is only one telephone line for every two hundred people—and many of those are concentrated in urban South Africa, whose telephone system still evidences the legacy of apartheid. Moreover, the breakdown of civil society in countries like Rwanda and Sierra Leone makes any thought of Internet development seem impossible.

Harare, Zimbabwe

Moreover, many African governments have not encouraged the growth of media in general, let alone the Internet. As one university professor in Cameroon notes, "Since independence, the majority of Africans, who are mainly rural, have not had any meaningful access to the mass media: radio, television and the print media have been free and accessibly only in principle. Governments have seen and continue to see in information a weapon too powerful to be made accessible to the powerless masses."

Fortunately, many educated young Africans are optimistic and reject both political and economic barriers. On the question of the lack of infrastructure, some see this as an advantage: "Africa's lack of infrastructure may be seen as a disadvantage. But on closer examination, this can be turned into an advantage.... African countries are not encumbered by extensive networks built on obsolete technology that will require an evolutionary process of replacement. The technological inertia is thus quite low. The push therefore should be for the cutting edge."

With this kind of spirit, African ministers responsible for economic and social development and planning met in Addis Ababa, Ethiopia in May 1995 under the auspices of the United Nations Economic Commission for Africa and passed a resolution, "Building Africa's Information Highway." This resolution called for a group of African technical experts to draw up a detailed plan for moving Africa into the information age within one year. The group of experts did their work and presented the results—the African Information Society Initiative (AISI) to the ministers' conference the following year. The AISI was endorsed by the Organization of African Unity Council of Ministers in Yaounde, in July 1996.

The AISI envisioned that Africa could develop an information society by 2010 by focusing on a number of key areas:

- Creating value-added information networks for education, health, environment, trade, tourism, finance, commerce, and other areas;

- Creating a continent-wide information and communications network allowing wide dissemination of information to individuals and businesses;

- Fostering a new generation of Africans by improving education systems and enhancing human resources with state-of-the-art technologies; and

- Allowing the inflow of new technologies and the export of intellectual products and services to the rest of the world.

The AISI called on national governments to build elements of the plan into their national economic and social plans and programs, and to adopt a five-year implementation plan. Among the items for government consideration were liberalization of telecommunications, and building a policy framework for electronic commerce, including intellectual property and digital signature laws. The AISI also identified efforts that would be of particular importance in Africa, such as improving food production with better information to provide crop-planting guidance, building tourism information systems, and preserving and communicating Africa's cultural heritage.

While the AISI started with good intentions and lofty aims, it lacked a key element: funding. Organizations such as the United Nations Development Program, the World Bank's InfoDev program, and the Canadian International Development Research Center have helped, but lack of funding has been a major hindrance. Additionally, privatization and liberalization of telecommunications is not popular in many countries, because of the loss of power and control it would bring for political elites and because of the short-term unemployment effects it would produce. Today, in most of sub-Saharan Africa, government is still the sole supplier of telecommunications. Prices remain high and services remain backward. There are, however, some signs of progress. Uganda has deregulated in some areas and allows some foreign investment in telecommunications. Sudan has privatized telecommunications and Ghana is selling off 30 percent of Ghana Telephone to private investors.

According to two researchers at the University of Botswana, "Fourteen countries have achieved live Internet public access services: [including] Algeria, Morocco, Tunisia, Egypt, Senegal, Ghana, Uganda, Kenya, Zimbabwe, Namibia, Mozambique, Mauritius and of course South Africa, which is among the top 20 countries in the world ranked by number of Internet nodes. Full Internet access has now been achieved in Botswana, Lesotho and Namibia. Projects are under way for full Internet access in Burkina Faso, Eritrea, Cote d'Ivoire, Malawi and Swaziland."

Whether or not Africa can achieve the goals of the AISI will depend on the organizational ability of the African states, the willingness of governments to allow the private sector to operate freely, and the help of international agencies. With its own more advanced infrastructure, South Africa is helping, not only by providing a model of activities in telecommunications in its own Reconstruction and Development Plan, but also in its regional leadership in southern Africa. South Africa's "Green Paper on Telecommunications Policy" identifies specific regional undertakings, such as telecommunications training and standards development, as well as the building of terrestrial networks, through which the country can begin to assist its neighbors along the information highway •

Regional Territorial Policies and Urban Economic Development in OECD Countries

MARIO PEZZINI

Organization for Economic Cooperation and Development

Significant territorial disparities, as measured by income and unemployment, exist today within the economies of the member nations in the Organization for Economic Cooperation and Development (OECD) While national differences in income and unemployment remain stable and narrow, the differences between urban regions are much greater While policies to address sub-national differences are not a new phenomenon, recent work on territorial policies has focused on the benefit that could be drawn from a more systematic approach Sound macroeconomic policies will not be sufficient to deal with new and more intense regional problems. Globalization, while increasing the interdependence of nations, is forcing the modification of the traditional policy instruments through which governments influence the process of economic and social change Moreover, traditional territorial policies, concerned with the equitable geographical redistribution of resources, are not the appropriate answer to the new conditions engendered by globalization.

In the past two decades, most OECD member countries, regions, and localities have undertaken significant reforms while several have completely overhauled their territorial policies. Lessons from the experience of these countries and regions may facilitate development of more effective general economic services to address territorial disparities. What follows is a brief summary of these key lessons.

POLICY OBJECTIVES

There is a new focus on trying to improve the "competitiveness" of regions, and to understand the key elements that differentiate types of regions, distinguishing those that appear to be performing well from those that are not. Resources from existing subsidies are being diverted to programs that focus on support for investment in human and social capital, diversification of economic activity by industry and employment, and the related creation of new enterprises, key infrastructure, the environment, and innovation.

> ... investment in human and social capital, diversification of economic activity by industry and employment, and the related creation of new enterprises, key infrastructure, the environment, and innovation.

POLICY INSTRUMENTS

In an effort to reinforce the efficacy of regional development policies, by using indirect aid such as services for general economic expansion rather than targeted subsidies, the primary focus is on policy instruments that promote:

- Business assistance and infrastructure, networks of knowledge and expertise, diffusion of new technologies and innovation-oriented research and development, inter-regional and international business networks, and vocational training (including an important emphasis on entrepreneurial skills);

- Local products based on local identities and aimed at a specific market niche; these are usually linked closely to local natural and cultural assets, including development of quality labels and guarantees linking products to places, and particular production techniques;

- Attractiveness of cities and rural areas, both directly through capturing the economic value of "amenities" for recreation and tourism, and indirectly through the promotion of conditions likely to favor a better quality of life in both cities and the countryside; and

- Capacity-building for policymakers at local levels, including the increased use of program monitoring and evaluation procedures both as a control and a learning mechanism.

Portimão, Portugal

Amsterdam, Netherlands

GOVERNANCE OF POLICY

There have been improvements in the central coordination of a wide range of policies affecting citizens through institutional arrangements of departments and ministries, including "policy proofing" to ensure that all such policies contribute to the overall goals and that actual or potential policy conflicts are minimized. New institutional arrangements at local and regional levels have been attempted to more precisely define policy objectives, priorities, and strate-

Patmos, Greece

gies, and to effectively implement policies and program the level of regional and local governance. In addition, new approaches involve partnerships between governments and non-governmental entities in ways that better integrate and coordinate their activities, and draw on local and regional knowledge and other resources to increase the participation of citizens, small businesses, and community-based groups. Local capacities are being built to act through grass-roots leadership, community development initiatives, and empowerment of local actors—i.e., a better matching of responsibilities and powers.

In many cases, these refinements and innovations are recent and limited in scope to certain OECD countries. As such, they have not been comprehensively evaluated. Additional work will be needed to ascertain the durability and transferability of these initiatives on a wider international scale. Nevertheless, this brief survey lends support to the argument that economic services of general interest have now gone beyond the experimental phase, both providing a complement to macroeconomic policies and offering new trajectories of economic development for urban regions. •

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Non-Governmental Organizations and Community-Based Economic Development

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Comeback Cities: A Blueprint for Urban Neighborhood Revival, by Paul S. Grogan and Tony Proscio, Westview Press, 285 pages, $25.00 (USA).

In *Comeback Cities,* Paul S. Grogan and Tony Proscio make the case that ordinary people can "change, create, and make use of market forces to alter the fundamental economics of their neighborhoods." They offer a well told and hopeful story of grassroots activity breathing new life into cities—even in such blighted areas as New York's South Bronx.

Their focus is on the work of community development corporations (CDCs). "With government support, and a minimum of regulations," the authors say, CDCs "are among the most effective vehicles for public investment in the inner city."

The authors draw on the success of the national organization Grogan headed for 13 years, the Local Initiatives Support Corporation, or LISC. (Grogan is now an executive at Harvard University; Proscio is a former journalist and government official who is a consultant to non-profit organizations.) Founded more than two decades ago by the Ford Foundation to provide financial and technical support for community development groups, LISC has played a major role in encouraging CDCs in their efforts to attract investment, jobs, and people back to struggling neighborhoods. *Comeback Cities* is an elaboration of *Life in the City,* a 1997 study by LISC and the Center for National Policy. In turn the book follows paths blazed in the mid-1990s by the U.S. Department of Housing and Urban Development (HUD) under Secretary Henry Cisneros, including the 1996 HUD report *Comeback Communities: The Revival of America's Cities.*

Grogan and Proscio provide many examples of what CDCs can do. For instance, in Newark's Central Ward, which was the site of riots in 1967, there has been an "amazing turnaround" led by the New Community Corporation (NCC). Founded by Father Bill Linder, a Catholic priest, the NCC has developed more than 3,000 homes and apartments, and a supermarket-anchored shopping center. There are day care centers and a nursing home, a job-training-and-placement center, an elementary school, a credit union, and a newspaper. Now private developers are building market-rate housing nearby. "What the community organization created was not just a string of successful projects for its residents to take pride in," the authors say. "It created a market, in which other enterprises found ways of adding value, making money, and widening the recovery in ways that needed little or no civic or philanthropic prodding."

There are many links that make such public-private partnerships work: the federal, state, and local governments are instrumental (together they pumped literally billions of dollars into the South Bronx alone during the past two decades).

Banks and other private lenders and investors—moved both by the "carrot" of the federal Low-Income Housing Tax Credit and the "stick" of the federal Community Reinvestment Act—are key. And retail chain stores and real estate developers, lured by the prospects of new inner-city markets, are important. As well, some CDCs have played a role in supporting urban anticrime efforts based on community-oriented policing, and in sponsoring public charter schools geared to improve career opportunities and to retain and attract working families as neighborhood residents.

Comeback Cities is less impressive when the authors stray from their direct knowledge of CDCs and range into national policy. Chapters on public housing and welfare reform, "deregulating the city," and "the 'third way' in city hall" are the weakest. And factual errors crop up throughout the book. CDCs have sprung up across the nation—but how many? There are "more than 2,500" on page 56 and "more than 3,600" on page 69. Atlanta's Techwood—which was not, as they report, "America's first public housing" (that distinction belongs to New York City's First Houses)—got its $42-million federal grant in 1993, not 1994. The law requiring local public housing authorities that receive federal funds to demolish one "slum dwelling" for every new public housing unit built was passed by Congress and signed by the president in 1937, not 1949.

Those may be minor points, but this one isn't: Most of the major public housing reforms of recent years were first proposed by President Clinton and Secretary Cisneros in the Housing Choice and Community Investment Act of 1994. That legislation passed the House but was blocked in the Senate. Grogan and Proscio incorrectly state that the impetus for such changes came from the Republican takeover of Congress in 1995 and that Cisneros was merely responding to the hostility of congressional conservatives. Such misinformed research and inadequate fact-checking undermine the authors' credibility as national policy experts. Their book does a service, though, in spreading the news about the many wonderful accomplishments of grassroots efforts and public-private cooperation to revive American cities. •

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Do Property Rights Matter?
An Urban Case Study from Peru

ELENA PANARITIS
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PROPERTY RIGHTS AND SECURE TENURE

When Manuel Perez, a shirt manufacturer in Lima, Peru, wanted to expand his business, he could not obtain formal credit. Even though he owned real property, the commercial banks in Lima would not accept his house or his land as collateral for a loan, because his property rights were not formalized or secure. Insecure real property rights affect the structure of financial services and can impede the supply of formal credit, especially to potential low-income borrowers. As the Perez case illustrates, insecure property rights, coupled with the expectation that these rights will remain insecure in the future, make the use of land or buildings as collateral impractical for millions of low- and modest-income property owners. In cases where real property is used as collateral, it has low value; loans are very expensive because banks face high transaction costs for providing credit and collecting collateral, and thus they charge steep interest rates. Because bank loans to low-income people are typically smaller and riskier, the absence of a formal property rights system makes such lending generally unprofitable. This in turn generates a vicious cycle of historical exclusion from formal lending, affecting many potential customers. If property rights are insecure, neither property owners nor credit providers have an incentive to use real property as a capital asset.

Because of inefficient, burdensome, poorly defined institutions and often-corrupt bureaucratic systems, a great mass of the world's population is prevented from fully realizing the value of existing property or being able to acquire secure property rights. In developing countries, the main issue is that property claims by these people, while acknowledged within their communities, too often go unrecognized by the government. As a result, these informal owners, who account for more than 50 percent of all property holders in most developing countries, lack access to the social and economic benefits provided by secure property rights. For many of these struggling families and entrepreneurs, their land and homes are their only assets. Without clear ownership rights, they are unable to sell their land, use it as collateral to borrow money, start a business or

build a home, or even to pass it on to their children.

Real property is the foundation upon which citizens build their participation in both the community and in civic and public life. When low-income and middle-income people own property in a secure and recognized fashion, they are more likely to keep jobs, attend school, seek medical care, invest in land, protect the environment, and build social harmony. Secure and formal property rights are part of the fundamental institutional infrastructure of a market-based economy. They stimulate both investment and the creation of formal and efficient markets. Nonetheless, many developing countries lack a well-defined institutional framework for property rights, resulting in a very informal delineation of property ownership.

Secure property rights foster confidence in the economy. Formalization of real property ownership rights directly stimulates significant investment. In the case of urban property, owners may initiate home improvements such as adding indoor plumbing, reinforcing existing construction with more durable materials, or constructing additional floors and rooms. Entrepreneurs invest with greater confidence in buildings and equipment, thus fostering the growth of small urban-based businesses. In the case of rural property, formalization encourages investments that increase the productivity of agricultural land, including permanent irrigation and crop processing. Moreover, secure property rights

Lima, Peru

Lima, Peru

help optimize the use of land by encouraging the consolidation of efficiently sized agricultural units.

The formalization of real property rights expands property-based markets and makes them more efficient. Reducing the price distortions of informal markets will lead to positive growth of property values. Also, the use of real property as a capital asset can introduce new actors to the credit markets—borrowers who previously had no credit history but deserve an opportunity to obtain loans, invest capital, and repay their debts. Moreover, security in property rights benefits workers by increasing their ability to become homeowners. By making the value of their homes more easily marketable, it also improves labor mobility and economic efficiency.

A TRADITION OF INFORMALITY

There are various reasons that explain the informality of property systems in the developing world. In many countries, a tradition of informality has evolved because of the lack of appropriate institutions that foster formal property rights. The absence of institutional depth has been reinforced by insufficient economic incentives for defining and applying property rights. Existing institutional structures have been deeply rooted for many years, often for several generations. Old attitudes are embedded in government agencies, educational systems, and professional practices.

In the case of real property, many developing countries exhibit an interest in establishing a formal property rights system. Yet most of these countries have not been able to

overcome the problems posed by poorly defined institutions, such as cumbersome bureaucracies, voluminous legal and administrative requirements, high transaction costs, and the presence of more than one agency responsible for the provision of property titles. These countries face the challenging task of establishing a reform program that tackles these inefficiencies, but also creates adequate, sustainable, cost-effective institutions.

FORMALIZING PROPERTY RIGHTS IN PERU

The Peruvian program, supported by the World Bank, is designed to establish formal and secure property rights by applying a comprehensive approach to property formalization, addressing all aspects of this elemental issue in civil society. Property rights reform is based on seminal work by Hernando de Soto, internationally recognized author of *The Mystery of Capital*, and his Instituto Liberdad e Democracia. It departs from traditional concepts of titling and registration by building instead a low-cost, user-friendly property market system. Traditionally, attempted reforms of real property rights have been too narrow in scope. Mainstream property rights reform efforts generally emphasize purely technical and administrative issues without transforming major public and private institutions, which are in large part responsible for the malfunctioning property rights system. For reform to be successful, governments must simultaneously address multiple issues surrounding the legal, economic, and organizational deficiencies of the existing system. The ultimate goal should be to facilitate creation and

promotion of formal markets for real property that are not simply based on blindly copying systems from other countries or establishing computerized technology for land titling.

Peru's Urban Property Rights Program goes beyond the more traditional "technical" applications of property-based reform by addressing the issues of transaction costs, applying cost-benefit technologies, and holistically building social integration and trust between communities and governments. The program transforms informal market "onlookers" into active players in capital markets. In doing so, it increases the base and scope of capital markets and enables property-related institutions such as real property registries to work in a more effective and efficient manner.

PERU'S URBAN PROPERTY RIGHTS PROGRAM: IMPACTS AND OUTCOMES

Peru began to initiate legal reforms for the establishment of property rights in the late 1980s and early 1990s. These activities laid the groundwork for implementing major reforms in selected urban areas by the World Bank in 1992 – a $500,000 pilot project financed by a Japanese Technical Assistance Facility. Peruvian land reform continues today with assistance from a $37 million loan made by the World Bank in 1997. By August 2000, the Urban Property Rights Program had assisted close to 7 million Peruvians in securing land title, introducing more than $4 billion of previously informal real estate assets to the organized capital markets. Since the beginning of the program, property values for the newly formalized urban land increased by more than $1.7 billion. Preliminary results from a baseline household survey suggest that there is a direct correlation between property formalization, perception of tenure security, and willingness to increase investment. A significantly higher proportion of property owners with formalized rights enter the credit markets and increase the value of their assets by obtaining financing to make physical improvements.

Key to the program's success is the careful analysis of citizens' needs, by studying the specific circumstances and listening to people's concerns. In the early 1990s, a public

hearing was held to discuss needs and the next steps for resolving the problem of informal ownership. As a result of this meeting, two essential new laws were passed as the basis of the new property rights system: one law created the Registro Predial, the property registry, which drastically reduced transaction costs; the other law consolidated the functions of 14 agencies into one titling agency, the Commisión para la Formalización de la Propriedad Informal (COFOPRI). The cost for registering and titling property was reduced overnight from $2,000 to $50, and the length of time necessary for registering and titling property dropped from 15 years all the way down to 6 weeks or less.

PROPERTY RIGHTS REFORM—A NEW DEVELOPMENT PARADIGM

Formalization of property rights is not just an isolated technical exercise in defining the ownership of tangible assets. More importantly, it is a process that integrates the assets of the informal sector into the legal and economic system of modern society. By integrating low-income families into the fabric of modern life, it creates rights and obligations that permit small property owners to develop a greater sense of partnership with the government and private sector, enhances property values, and leverages financial resources for generating economic growth and prosperity.

Although the design of property rights reform must always consider specific circumstances within each individual nation, two important lessons can be drawn from past attempts: a) reforms should be demand-driven and user-oriented; and b) governments should match their resources to their capabilities. The institutional framework of a formal property rights system consists of three necessary elements: (i) the legal framework that defines property and guides the behavior and incentive structure of property-related transactions; (ii) the agencies that implement and administer property rights; and (iii) the institutions responsible for property rights enforcement. Reform of the property rights system in Peru successfully focused on the three main fundamentals of formalization: 1) establishing appropriate legislation; 2) building effective organizations; and 3) creating suitable enforcement mechanisms.

Formalizing property rights is both a social and political goal, and clearly can be used to promote a more competitive and sustainable economy. The holistic approach in Peru is a cross-sector strategy for creating free real property markets, where transaction costs are minimized, rights and obligations are enforced, and most importantly, a modicum of trust between the people and their government begins to be established. •

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Lima, Peru

Metropolitan Manila: People's Participation and Social Inclusion in A Global City-Region

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SOCIO-ECONOMIC CHALLENGES FACING METROPOLITAN MANILA

Issues of urban governance are crucial to the future of metropolitan Manila because the current situation in the region poses tremendous challenges. For one, this mega-region is continuing to urbanize and grow very rapidly. While inner-city communities like Escolta and Binondo have deteriorated and are losing population, suburban areas like Pasig City and Taguig are growing at an annual rate of 4.65 and 7.11 percent respectively. Metropolitan Manila is an administrative intergovernmental jurisdiction formed in 1975 encompassing the City of Manila, 3 other major cities, and 13 municipalities. Today it accounts for 25 percent of the total urban population of the Philippines and contributes 15 percent of the urban poor nationwide.

The main challenges facing metropolitan Manila are the lack of sufficient affordable housing, and inadequate urban services. Innovative approaches such as community upgrading of sites and services have been carried out since the 1960s, but these have failed to adequately respond to the needs of the bottom 20 percent of urban low-income families. The Zonal Improvement Program, and the Slum Improvement and Renewal programs have made safe drinking water, flush toilets, paved pathways and other basic needs accessible to many of the poor, but demand for decent quality affordable housing still far outstrips available supply. The Community Mortgage Program has enabled some low-income families to buy the land upon which their shanties are built, but this initiative has been plagued by insufficient land and government financing. Meanwhile, the private housing sector has mainly focused its attention on market-rate, middle-income housing – building thousands of new subdivision developments on the urban periphery and, sometimes, siphoning off funds earmarked for the poor and investing it in building homes for a more affluent population.

Metropolitan Manila's nearly 11 million residents generate over 6,000 tons of solid waste per day, 10 percent of which ends up polluting various rivers and canals. Nearly all of the trash dumps and landfills in the metropolitan region are already filled to capacity. During 1999, a mountain of garbage in Payatas collapsed and buried more than 200 scavengers, leading to the closure of the entire facility. The passage of the Clean Air Act in 1998 outlawed the use of incinerators to burn garbage. As a consequence, metropolitan Manila now relies exclusively on open dumps or sanitary landfills. However, a strong not–in–my-backyard (NIMBY) attitude among local governments has created huge problems in finding new dump sites.

About 42 percent of all motor vehicles in the Philippines are registered in metropolitan Manila. Thus the region is perpetually caught in traffic gridlock – the average vehicle

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speed on a major thoroughfare such as Epifanio de los Santos Avenue rarely exceeds 12 kilometers per hour. Motor vehicle traffic continues to increase, despite the construction underway on the second phase of the metropolitan rapid transit system. One-third of the more than 18 million vehicular trips per day rely on low capacity private vehicles, while another 45 percent of these daily trips are by unscheduled jitneys and buses. Air quality in metropolitan Manila is so bad that some officials fear there may be harmful health effects on children from mercury and other air pollutants.

Metropolitan Manila suffers from acute water shortages during the summer months, along with substantial flooding during the monsoon season. Manila's waterworks system was first installed in 1878 and has not kept up with the city's population growth. In May 2000, it was estimated that only about 63.5 percent of the fresh water supplied by the system was accounted for, with the rest being lost to leakage of various kinds. Over 50,000 households have no access to sanitary facilities. The metropolitan sewer system covers only 20 percent of the total population, with the other households relying on septic tanks or disposal of waste water in canals and rivers.

During the rainy season, metropolitan Manila is frequently flooded. Over 44 square kilometers — 7 percent of the land in the metropolitan region — are frequently prone to substantial flooding. Since metropolitan Manila is hit by almost a dozen typhoons each year, considerable damage is caused by floods. The situation is made doubly hazardous by the fact that the city's sanitary sewers and storm drainage systems are combined, posing serious health threats of cholera, hepatitis and other water-borne diseases during floods. The Pasig River, the Marikina River and other waterways in metropolitan Manila are biologically dead. Fish and shellfish from Manila Bay are not safe to eat because of

contamination and the periodic outbreaks of red tide disease that occur during the summer months.

From 1987 to 1992, metropolitan Manila suffered from a severe shortage of electrical energy. Curtailment of electricity service — "brownouts"— took place almost daily, causing huge losses in production and commerce. President Ramos was granted emergency powers to solve the energy crisis, which he addressed mainly by importing additional second-hand electrical generating equipment, along with massive quantities of foreign oil. The privatization of some of the electricity distribution lines has introduced increased efficiency to the grid system, but the National Power Corporation, a major government-owned energy supplier, is saddled with a huge financial debt that makes it unattractive to private investors.

In spite of the above-mentioned challenges faced by metropolitan Manila, there is room for optimism in the future because regional cooperation and collaborative action is becoming more viable as a solution to dealing with major problems. The current expansion of the metropolitan rapid transit system promises to help ease motor vehicle traffic congestion. The construction of toll roads and skyways linking metropolitan Manila to other urban centers also will alleviate some local traffic congestion. A computerized traffic management and monitoring system is now operating at a metropolitan level, improving regional cooperation. Experimental approaches, such as limiting the number of vehicles operating in the central city on certain days and times, should also help reduce urban congestion. Greater use of traffic aides by the Metropolitan Manila Development Authority to promote stricter enforcement of traffic laws may have a positive impact, although inadequate driver education along with widespread corruption in the issuance of drivers' licenses and the "fixing" of traffic tickets continue to be serious problems.

Residents of metropolitan Manila also can look forward to better water services. The completion of the Umiray Dam will provide adequate water supplies for the next 21 years. Privatizing the Metropolitan Waterworks and Sewerage Authority may produce more efficient service. Under the privatization agreement, which is in effect until 2021, the total integrated water, sewers, and sanitation system involves investments of $7.5 billion of which $4.5 billion is allotted to the West Zone. In the West Zone alone, which covers over 540 square kilometers, these new private investments would pay for 1,000 kilometers of new water pipes, 200,000 new water connections, and replacement of 200,000 water meters.

Strategic planning and coordinated regional action are also likely to enable metropolitan Manila to control and regulate urban sprawl. Philippine government officials now see the merits of a comprehensive development plan for the Manila region that encourages development of peripheral urban commercial and residential growth poles that are closely and efficiently linked to the central city through transportation and telecommunications infrastructure. Metropolitan Manila has recently gained access to the excellent infrastructure and facilities of the former American military Navy base at Subic Bay and Air Force base at Clark. To further the regional development strategy, these former military bases have been con-

verted into Special Economic Zones devoted to promoting the growth of export-oriented businesses. Subic Bay, for example, now employs more than twice the number of Philippine workers than were formerly hired by the American military. Increasing numbers of Philippine workers are now employed by high-tech companies, recreation and tourism enterprises, and a wide range of business and consumer services. Similar success has been achieved at Clark in attracting the electronics and tourism industries. These two Special Economic Zones are being linked by efficient transportation systems to metropolitan Manila and other urban centers. Soon metropolitan Manila's rapid transit lines will be extended to Subic Bay and Clark, and the Philippine government is considering a proposal to develop Clark as the nation's main international airport.

All in all, regional planning and governance are slowly starting to improve conditions in metropolitan Manila. The privatization of some services has helped improve efficiency in metropolitan service delivery. A continuing obstacle has been the previous legacy of decentralization to small and weak local government units. If metropolitan Manila is to effectively meet its development challenges, broader regional governance mechanisms are needed, and must obtain support and gain cooperation from advocates of local autonomy and decentralization.

PARTICIPATORY APPROACHES TO GOVERNANCE

The particular nature of Philippine society, including the commitment to democracy and strong belief in the importance of civic participation, has translated into growing pressure for citizen involvement in urban governance. Interestingly, the abuses of the Marcos dictatorship seem to have fueled the formation of non-governmental organizations, people's coalitions and movements, and other civil society groups. The power of such citizen groups reached its zenith during the 1986 "people power" revolution that toppled the Marcos dictatorship. At present, there are at least 58,000 non-governmental organizations of various types nationwide that are officially registered with the Philippine Securities and Exchange Commission, and many more that remain unregistered. These civil society groups are involved in practically all aspects of governance. Many are nationally coordinated through a confederation of non-governmental organizations called the Caucus of Development NGO Networks.

The 1987 Philippine Constitution officially recognizes the importance of civil society groups in the following provisions:

- The State shall encourage non-governmental, community-based, or sectoral organizations that promote the welfare of the nation (Article II, Section 23).

- The State shall respect the role of independent people's organizations to enable the people to pursue and protect, within the democratic framework, their legitimate and collective interests and aspirations through peaceful and lawful means (Article XIII, Section 15).

• The right of the people and their organizations to effective and reasonable participation at all levels of social, political and economic decision-making shall not be abridged (Article XIII, Section 16).

Pursuant to the Constitution, sectoral organizations were mobilized in the 1998 presidential and local elections to elect representatives to the Philippine House of Representatives. Similar campaigns were also waged to elect sectoral representatives to local government councils. This initial election process faced many difficulties, including the confusion in differentiating genuine citizen groups from government-sponsored organizations and surrogates for political parties. Yet a number of genuine grassroots representatives actually got elected to the national legislature and local councils.

The Local Government Code of 1991 also provided for the participation of community-based organizations and other citizen groups in the formal structure of legislative bodies, such as city and municipal councils. It urged that civil society groups be included as joint venture partners with private and public sector entities in carrying out development projects. The government also was authorized to provide funds to non-governmental organizations and other civic groups to enhance their capabilities for contributing to economic, social, and community development.

At present, active participation in local governance by non-governmental organizations and other groups can take the following forms:

• *Collaboration in policy setting and plan formulation:* Elected sectoral representatives in the national legislature and in local government councils officially participate in policy setting and plan formulation. For example, the passage of the "Integrated Ecological Solid Waste Management Act of 2000" was partly attributed to the effective lobbying efforts of organizations such as the Eco-Waste Management Coalition, the Recycling Movement of the Philippines, Mother Earth, Greenpeace, and Zero-Waste Management.

• *Collaboration in program and project implementation:* National and local government agencies are required to involve civil society groups in program and project implementation as well as monitoring and evaluation. Such participation includes non-governmental organizations providing training for citizens to prepare for project involvement; the actual subcontracting of project implementation to local groups as is done with the Community Mortgage Program; joint financing of development projects; and project monitoring and evaluation of program impacts. Non-governmental organization representatives have been appointed to governmental councils such as the Philippine Council for Sustainable Development.

• *Participation in public information and dissemination activities:* Many government agencies find non-governmental organizations and other civil society groups very effective in gathering and disseminating information. For example, efforts to inform the public about key issues during elec-

tions have been carried out by such citizen and community-based networks. Civil society groups also have participated actively in mass media campaigns, public dialogue, and even street demonstrations enabling their voices to be heard. Although some of these grassroots activists have been criticized by some public officials for being confrontational and antagonistic, many ordinary people rely on them as objective sources of information that otherwise would not be available from government agencies or established media outlets. This "alternative press" movement has been very active in providing useful information and education to the general public.

Thousands of civil society groups in metropolitan Manila and other parts of the Philippines have achieved many successes through their active participation in governance as policy advocates, lobbyists, and joint venture partners with state institutions in carrying out programs and projects. The passage of the Urban Development and Housing Act of 1992 shows the power of local groups in influencing national legislation. The driving force behind the vigorous advocacy campaign was a coalition called the Urban Land Reform Task Force, made up of a wide variety of business, professional, faith-based, and reform organizations including the National Congress of Urban Poor Organizations, the Foundation for Development Alternatives, the Bishops-Businessmen's Conference, and the National Urban Poor Movement for Urban Land Reform.

This broad-based grassroots movement succeeded in winning passage of the 1992 Urban Development and Housing Act by pursuing several key strategies. First, the groups engaged in coalition building that harmonized their education and advocacy efforts and strengthened their base of support. This was not easy because the groups were made up of very different orientations, ranging from the radical Socialist Party of the Philippines to the conservative church-business coalition of the Bishops-Businessmen's Conference. Second, the civil society groups engaged in horizontal and vertical linkages, combining the efforts of mass-based urban poor groups with elite forces in the religious and civic communities. Third, the civil society groups tapped the support

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of power brokers such as key legislative leaders, the Cardinal, groups of lawyers, and the religious orders. Fourth, these groups waged an active media campaign, aided by journalists and editors sympathetic to their cause, that kept the issue on the front pages until the law was passed. Finally, the civil society groups did not neglect their technical work. They were deeply involved in formulating the legislation, conducting research, and mobilizing sound data as the basis for strong arguments. They effectively utilized such well-documented arguments for housing and urban land reform by learning the intricacies of parliamentary techniques and debate and applying them to good use by working together with their allies in the House of Representatives and the Senate.

Despite the acknowledged involvement in urban governance by non-governmental organizations in metropolitan Manila, there are numerous points of contention. Some civil society leaders feel that the government is not sincere in inviting them to participate more actively in governance – that a primary goal of government leaders is simply to co-opt local groups into supporting the government's preconceived agenda. On the other hand, some government officials accuse community activists of primarily organizing opposition movements rather than genuinely collaborating with public policy. This uneasy tension between government and civil society is a carryover from the period of the Marcos dictatorship, when many of the non-governmental organizations were established explicitly as opposition groups for democratic reform.

Civil society leaders categorize non-governmental organizations (NGOs) and people's organizations (POs) in the Philippines on the basis of their autonomy or dependence on governmental resources. One humorous version of such classification by a prominent community activist includes the following:

- *GUAPOs*, or Genuine Autonomous People's Organizations are truly independent and shun the support of government, business groups, and people with vested interests.

- *DJANGOs* or Development, Justice and Advocacy Non-Governmental Organizations are autonomous organizations that provide support services to the poor. Many of them receive support from international organizations but they insist on their functional independence.

- *TANGOs* or Traditional Non-Governmental Organizations are more likely to be charitable, welfare and relief organizations usually formed by upper and middle-income people to help the poor.

- *GRINGOs* or Government Run or Initiated Non-Governmental Organizations are usually set up by state organizations to pursue activities in support of government functions. They are similar to GRIPOs or Government Run and Initiated People's Organizations, that are set up mainly to receive funds and other resources from the government (The term "gripo" in Tagalog literally means "faucet").

- *BONGOs* or Business-Organized Non-Governmental Organizations are set up by the private sector to achieve specific benefits such as land acquisition through public authority, tax reductions, or mechanisms for quelling labor unrest.

It is obvious from the nomenclature of organizations mentioned above that the main criterion for classification is their goals and objectives, the nature of their funding support, and their relative autonomy from various special interests. Some community activists in metropolitan Manila are highly critical of citizen groups that act primarily as advocates for the government, the private business sector, or other funding sources. The cynicism that is apparent in the classifications noted above creates tension among the groups themselves. Although the Caucus of Development NGO Networks has tried to achieve harmony and cooperation, there continues to be considerable disagreement.

Despite the competition and suspicion among civil society groups in metropolitan Manila, there is widespread consensus that a united front should be set up to avoid potential manipulation or divide-and-rule tactics by the government. Local groups often have united to oppose governmental efforts that impose greater regulations on their activities. For example, some non-governmental organizations do not want to submit to formal accreditation and registration with the Securities and Exchange Commission. They object to fiscal requirements that they should officially account for the funds they receive. They feel that these control mechanisms are designed to diminish their power and independence. Government agencies, in turn, argue that it is irresponsible for local groups to receive funds without adequate public accounting. Even in the case of funds that come from international organizations, public officials insist that full financial disclosure should be the rule.

Many observers of the Philippine situation have commented favorably about the increasing management professionalization in civil society groups. Widely recognized NGOs, such as the Philippine Rural Reconstruction Movement, Philippine Business for Social Progress, and the Caucus of Development NGO Networks, are led by highly trained and competent managers who have had long careers as executives for such organizations. In the case of many small and struggling grassroots groups, however, their leaders are too often engaged in a constant search for operating funds just to survive. Most of these organizations simply cannot afford to pay the salaries for full-time professional management. Indeed, some community leaders fear that their organizations may become too big and bureaucratized, which could diminish the political effectiveness and grassroots accountability of their groups and movements. ◦

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Developing New Financial Instruments in Mexico and Other Nations to Expand Affordable Homeownership

SOULA PROXENOS
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Mexico, like many countries around the world, faces a severe shortage of affordable housing. As a result, the Mexican government established Fondo de Operación y Financiamiento Bancario a la Vivienda (FOVI) in 1963, a trust fund administered by Banco de México, to help provide homeownership financing for low-income families and increase the supply of affordable housing in Mexico. Recognizing FOVI's need to establish a sustainable source of housing funds, FOVI-Banco de México consulted Fannie Mae to help refine FOVI's strategic financing plan.

In an attempt to address housing finance issues, the Mexican Government has made substantial institutional and legislative changes with support from the international housing finance industry. In the late 1990's, FOVI-Banco de México began to adjust financing procedures and overall scope to match housing needs more closely, looking to Fannie Mae because of their expertise in housing finance in the United States. As a large secondary mortgage market institution with over five decades of experience, Fannie Mae offers significant knowledge of important issues in the development of a sound national housing finance industry, such as the use of leading edge technology, and managing credit, interest rate, and operational risk.

Fannie Mae, responding to a large number of requests by international entities and foreign governments, established a department called International Housing Finance Services (IHFS) more than a decade ago. The IHFS mandate is to share Fannie Mae's experience with foreign governments and private financial institutions worldwide. By working abroad, Fannie Mae is able to keep abreast of new ideas and best practices from outside the United States that could foster greater housing affordability for families in America.

FOVI-Banco de México is not unique in its desire to tap into U.S. expertise. Addressing the needs of both emerging and developed markets, Fannie Mae has shared its knowledge, including missteps and mistakes, with more than 30 countries over the past 10 years. This work encompasses designing market-driven mortgage products; establishing the conceptual design of consumer education programs; creating geographic risk and credit risk modeling in South Africa; assessing the potential for developing a mortgage-backed securities market in Japan; and assisting in the development of business, operational, and technology infrastructure to help a secondary market conduit in Hong Kong securitize and issue debt. Drawing on U.S. technological expertise, Argentina has embarked upon the creation of a secondary mortgage market. Jordan's attempts to develop an efficient primary home mortgage lending market resulted in a seminar that included workshops on loan product development and marketing, credit underwriting, mortgage servicing, risk management and pricing, and portfolio management. In addition to on-site tailored training programs, Fannie Mae hosts a semi-annual training Symposium at its Washington, DC headquarters. The meeting takes place over an entire week, with delegates from all over the world sharing and learning from expert housing finance professionals.

A key component in the discussion of primary and secondary mortgage market development is the need to create sound land registry as a building block for generating robust housing markets. A sustainable housing finance system must be founded on an established system of property rights, property titling, and clear, consistent legislation. It is upon this foundation that a standardized primary mortgage market can be built. When these building blocks are in place, then the country can begin to explore alternative sources of market-based housing finance. While this may sound simple, most countries around the world are still grappling with establishing basic institutional frameworks.

Like many economies in development, Mexico continues to work on fostering a healthy housing market that will create sustainable funding sources for affordable homeownership. Mexico has been building brick-by-brick each element of its housing finance system. While there are still formidable challenges ahead, Mexico is moving forward with the commitment that the foundation it is building will serve generations to come. As a leading organization in the U.S. housing finance system, Fannie Mae will continue to support this process in Mexico and around the world. •

Soula Proxenos is Director of International Housing Finance Services at Fannie Mae in Washington, DC.

Mexico City, Mexico

Making Cities Work: The Urban Strategy of the U.S. Agency for International Development

DAVID PAINTER

U.S. Agency for International Development

Urbanization is relentlessly sweeping across the globe. Regardless of the reason—be it the hope of gaining employment, receiving better health care, or enjoying a more secure livelihood—the rapid demographic shift to urban centers is redefining global development challenges for the 21st century. In the past, international, governmental, and non-profit development assistance organizations targeted rural areas as locations in which to reach the poor. Today they must rethink many programs to include the growing population of impoverished and disenfranchised urban residents in developing countries. The U.S. Agency for International Development (USAID) in late 1998 launched its *Making Cities Work* strategy that sets forth its plan on how to address urbanization as a development issue.

The Making Cities Work strategy aims to improve the management of urban growth in the areas of governance, infrastructure development, local economies, health, and the environment. By focusing on these issues, the U.S. Agency for International Development assists cities to:

- Promote participatory democracy and high levels of citizen satisfaction with local institutions;

- Provide basic infrastructure and housing to serve all their inhabitants;

- Generate robust economic growth, with ample opportunities for employment; and,

- Offer safe and healthy places to live and work, within a sustainable environment.

In the 1990s, developing countries struggled to accommodate an astonishing 150,000 new urban dwellers each day. During the first decade of the new millennium, this number is projected to rise to 180,000 people daily, or more than one million people moving into cities each week. The impacts of such rapid growth in urban centers are complex, and require moving beyond traditional development assistance strategies that focus separately on single-sector concerns such as economic growth, population and health, democracy and governance, agriculture, and the environment. The Making Cities Work strategy recognizes that urban problems must increasingly be addressed by comprehensive, multi-sectoral approaches in order to be effective Moreover, urban centers provide a valuable entry point through which development programs can be broadened to expand their effectiveness. The following examples illustrate the Making Cities Work approach.

INDONESIA

To capitalize on the synergies that exist in cities, USAID's urban program in Indonesia combined environmental infrastructure and participatory governance by providing technical assistance to city governments. Over the five-year life of this urban program, 26,000 neighborhood-based environmental infrastructure projects were developed and implemented, including sewers, communal solid waste facilities, culverts and drainage ditches, public water supply reservoirs and community bathing and toilet facilities. Millions of low-income urban residents benefitted from an improved built environment and increased employment. These "micro" projects were highly cost-effective for USAID

As an important aspect of infrastructure project development, USAID provided technical assistance to city government officials in order to facilitate opening up the planning and community development process to active citizen participation. The Indonesian Ministry of Home Affairs adopted this participatory planning model as a best practice in city management, and is promoting its use nationwide. USAID's Indonesian urban initiative is an example of how multi-sectoral approaches – in this case combining environmental improvement and participatory governance – can effectively leverage resources, foster community involvement, and improve the quality of life for low-income families in urban neighborhoods.

SOUTH AFRICA

In addition to encouraging multi-sectoral development approaches, the Making Cities Work strategy emphasizes the importance of building alliances with public and private development partners to coordinate investment efforts and maximize overall program impact. In Durban,

Urban Population Projections for 2025
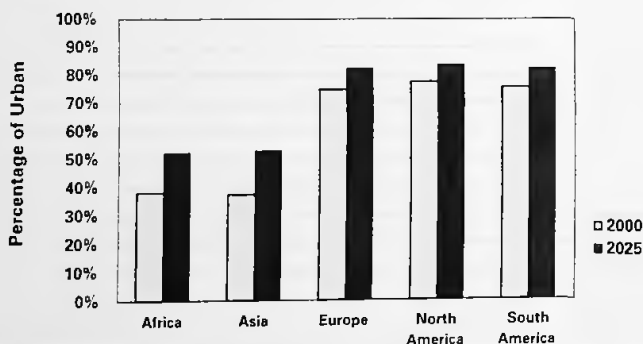
Source: United Nations Centre for Human Settlements (Habitat)

South Africa, USAID—working in close collaboration with the Malaysian Government, the Kasigo Trust, Oxfam Canada, and South African Regional (local government) Councils—co-funded the Kwazulu-Natal Project Preparation Trust. The Trust collaborated with a private South African development finance corporation to increase low-income families' access to formal credit. Through this innovative international partnership, the Trust successfully leveraged a substantial amount of private sector loan financing. In addition to targeting low-income families, the Trust also reached out to female-headed households. A majority of the 56,000 credit recipients are women.

USAID's program in South Africa also focuses on improving affordable housing and the urban built environment for Durban's poorest residents, including increasing homeownership opportunities. Approximately half of the loans went toward building and renovating housing, while the remaining loans were targeted to improving sanitation facilities, roads, and storm water drainage. By enabling urban residents to gain access to private credit markets and to invest funds in what they identified as their most urgent needs, the entire City of Durban benefited from creating healthier and more attractive living conditions and a better environment.

In partnership with private businesses, non-governmental organizations, and government agencies, USAID helped expand the availability of private financing for many low-income South Africans and generate positive multi-sectoral impacts on economic growth and quality of life.

In today's world of 6 billion people – nearly half of whom already live in urban centers, cities will increasingly play a major role in economic development. The challenge is to ensure that low-income families and communities fully benefit from the urbanization process. The U.S. Agency for International Development is committed to helping meet that global challenge by implementing its Making Cities Work strategy. To learn more, visit our Web site at www.makingcitieswork.org. •

David Painter is a Foreign Service Officer and Director of the Office of Environment and Urban Programs at the U.S. Agency for International Development in Washington, DC.

The World Planning Schools Congress in Shanghai, China, July 11–15, 2001

ZHAO MIN and ZHENG SHILING
Tongji University, Shanghai, China

Regional associations of planning schools, the (US-based) Association of Collegiate Schools of Planning (ACSP), the Association of European Schools of Planning (AESOP), the Asian Planning Schools Association (APSA) and the Australian and New Zealand Association of Planning Schools (ANZAPS), are jointly organizing the first ever World Planning Schools Congress (WPSC) 2001 to be held in Shanghai, China, on July 11–15, hosted by the College of Architecture and Urban Planning of Tongji University. The World Planning Schools Congress 2001 follows the successful experience of two previous ACSP-AESOP Joint International Congresses in 1991 and 1996 and marks the beginning of a more global perspective on urban planning and development issues.

"Planning for Cities in the 21st Century: Opportunities and Challenges" is the broad theme of the World Planning Schools Congress 2001, covering a wide range of topics that planning educators and other planning professionals will face in the coming era. Topics include: the role of cities and regions in globalization; public participation, urban governance, and public policy; housing and community development; gender, race, and social exclusion; telematics and application of information technology in planning; sustainability of urban and regional development; planning theory and history; land use, transportation, and growth management; urban design and physical form; infrastructure planning; planning for tourism and recreation; planning education; historic cities and urban heritage; planning for developing countries; transnational planning; and planning and law. *Global Outlook* will be organizing a special session, including papers by co-editor Marc A. Weiss on metropolitan economic strategy, and co-editor Alven H. Lam on home-ownership and property rights.

The selection of Shanghai as the location for the World Planning Schools Congress 2001 reflects the view shared by the four international planning schools associations that the influence of the WPSC would be greatest if held in one of the world's fastest growing cities and nations, where both the opportunities and challenges are large, and the need for urban and regional planning is vital.

The Organizing Committee of the WPSC 2001 has received nearly 700 paper abstracts from over 60 countries. For detailed information on the conference program and related activities, visit the WPSC on-line at www.caup-tongji.org/wpsc2001.

Dr. Zhao Min is Dean of the Department of Urban Planning at Tongji University in Shanghai, China. Dr. Zheng Shiling is a Professor in the College of Architecture and Urban Planning at Tongji University in Shanghai, China.

Urban Development Timeline

EL MELLASSINE الملاسين

PADCO

1950s

Policies & Programs

Marshall Plan

Cold War

US Foreign Aid - Four Point Program for economic and social progress

Centralized planning, industrialization and technology transfer seen as keys to development

Renewed interest in rural development, town and country planning, garden cities and new towns to counter urban ills

Medical advances and other factors lead to rapid population growth and urbanization

10-15 % annual growth of informal housing generates fear of instability, crime, disease

New building materials, prefabricated housing are in vogue

Institutional Roles

Government as Architect

Emerging independent nations and institutions

Bretton Woods Conference

IBRD takes on development function

Birth of UNDP, Inter-American Development Bank and Bi-laterals

US Technical Cooperation Administration (later USAID)

Ford Foundation goes international

Best Practices & Lessons Learned

Economic planning - early success of centralized planning in Soviet Union

Master Plans and New Town
- Niemeyer, Brasilia
- Le Corbusier, Chandigarh

Turner's upgrading project begins in Peru

Failure to anticipate and acknowledge informal housing leads to gross underestimation of real housing supply
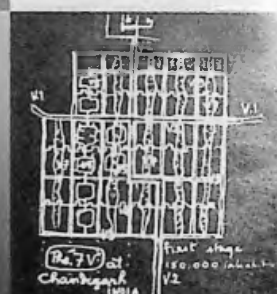
Methodologies & Tools

Export of western development theory, methods, standards, and regulations

Tools of the Trade:
- pencil and paper
- manual typewriter
- slide rule

urbantimeline.org

The Urban Development Timeline Project

SHARI KESSLER
Planning and Development Collaborative International

The Urban Development Timeline is a research and design project currently being developed by the Planning and Development Collaborative International (PADCO), a for-profit consulting firm headquartered in Washington, DC. The timeline is a comprehensive, multimedia technology, information management tool for international urban development planning. It will grow and deepen as various public and private partners contribute their knowledge and financial support to produce this unique training tool, comprised of a multimedia Internet site on the World Wide Web; a library; a CD-ROM/DVD series; a traveling exhibit; a seminar series; and other related products, services, and program initiatives to realize the full potential of the Urban Development Timeline as a learning tool for the global urban community.

The content of the Urban Development Timeline reflects ideas and experiences from the past five decades of urban development, 1950 to 2000. Within each decade there are five separate tracks: 1) benchmarks and trends; 2) polices and programs; 3) institutional roles; 4) best practices and lessons learned; and 5) tools and methodologies.

PADCO is creating the initial framework for the timeline and developing guidelines for its use by professionals, teachers, and organizations. Themes and issues will be prepared that review the experience of individual nations, and that cover a wide historical range of urban development strategies, case studies, and other data. As the project evolves, additional modules will be added for each decade tracking other important trends, including successes and failures, to help improve public and private decisionmaking for urban policy, planning, and development projects. Continually updated versions of the Urban Development Timeline can be viewed on PADCO's Web site: www.padcoinc.com.

Shari Kessler is Director of Corporate Communications for the Planning and Development Collaborative International (PADCO) in Washington, DC.

Urban Applications of Geographic Information Systems in Developing Countries

ELLEN BRENNAN-GALVIN
The United Nations

Over the past 30 years, the world's urban population has more than doubled, increasing by 1.5 billion inhabitants. In the next 30 years, most of the world's population growth will take place in urban areas of the developing world, which may gain as many as two billion inhabitants, increasing from 1.9 billion in the year 2000 to 3.9 billion by 2030. Much of this rapidly burgeoning urban population lacks basic fresh water supply, sanitation, adequate housing, education, and health services. These people bear the brunt of deteriorating urban environments and are exposed to cumulative risks—dirty air and water, insufficient waste removal, crime, traffic, and economic insecurity. Cities which two decades ago had 30 neighborhoods and one million people are likely today to have 130 neighborhoods and millions more people, all with basic needs to be satisfied. Each of these urban communities also requires institutions to assure their orderly governance and to meet the difficult demands and pressures that will come with rapid change.

A major reason why urban governments in many developing countries have not coped successfully with urban population growth is that they simply do not know what is happening within their local jurisdictions. Population data are severely lacking in most of the large cities in the developing world. Most large cities in developing countries also lack sufficient, accurate, and current data on patterns of land conversion and infrastructure deployment. Urban maps are frequently 20 to 30 years old and lack any description of entire sections of cities, and particularly of the burgeoning peri-urban areas. Moreover, records and information systems maintained by municipalities and utilities throughout the developing world are generally poor. In most of these cities, each municipal agency or department typically maintains its own database, often using differing standards, and rarely sharing its data. Computerization of such data is still relatively uncommon.

With the spread of democratization and decentralization throughout much of the world in recent years, local governments are increasingly being required to operate with the speed and efficiency of private businesses, while facing ever more complex political and regulatory issues. Local governments must digest an immense amount of information to perform their duties in a fair and sound manner. While not a panacea, Geographic Information Systems (GIS) are becoming powerful planning and management tools in meeting long term strategic planning and management challenges, and in performing the diverse functions of local government. Geographic Information Systems can process data from a wide range of sources, including information obtained from maps, images of the earth from space satellites, videos of the earth from low-flying aircraft, statistical data from published tables, photographs, data from

computer-aided design (CAD) systems, and data obtained from archives by electronic transmission over the Internet and other telecommunication networks—enabling urban areas to be described and monitored in a much more accurate and timely fashion than was previously possible.

Data integration is one of the most valuable functions of a GIS. A GIS uses geographic location to relate otherwise disparate data and provides a systematic way to collect and manage location-based information crucial to local governance. Because the spatial location of every item of information in a GIS database is known, geographic information technology makes it possible, for example, to relate the quality of groundwater at a site with the health of its inhabitants, or to compare development proposals with restrictions on land use. This ability to overlay multiple location-specific data sources gives GIS unique power in helping to make decisions about places and to predict the outcomes of those decisions. Linking location to information, for example, may help governments determine which parts of a city are most vulnerable to seasonal flooding or other natural disasters, or, to decide where a city is growing the fastest and is most in need of increased water, power, and telecommunications services.

Though GIS is a rapidly maturing technology, still at an early stage of application in many developing countries. Public sector managers in a number of developing country cities and metropolitan regions are beginning to employ GIS technology for diverse tasks, including land use and urban growth planning and permit tracking; economic development planning; infrastructure and transportation planning and management; crime tracking and law enforcement planning; educational planning; comparison of program effectiveness across local jurisdictions; taxation analysis and record-keeping; public health risk analysis; site selection

Lima, Peru

for service facilities; site selection for locally unwanted land uses such as landfills; emergency management; environmental monitoring; and public information services.

One such example of a fully integrated GIS is in the State of Qatar, which has been at the forefront of geographic information technology in the developing world. Qatar's GIS activities began in 1988, and the entire country is now covered by a high resolution, digital topographic database. In one particularly successful application, the availability of digital land parcel and building data for the entire country allowed the Central Statistical Organization to conduct an extremely comprehensive General Housing and Population Census in a single day. Qatar's successful application of geographic information technology cannot be easily replicated, however, since many of the factors behind its success are relatively unique. Such factors include the country's small size, high-level political support, authority to mandate and enforce uniform standards, outstanding technical leadership, adequate funding, centralized public sector institutions, and little previously existing GIS activity to impede coordination efforts.

In terms of developing GIS technology, perhaps the other extreme is Africa. Spatial data have always been available in various forms in most countries in Africa, especially in map form. However, information technology in general, and the geo-spatial data industry in particular, is quite undeveloped in most African countries. A major problem is that laws and administrative regulations give exclusive mandates to government departments, even when they lack the capacity to satisfy the needs of the expanding community of data users. The major sources of spatial information are the national mapping agencies. Many municipal authorities also gather spatial data, mainly land boundaries and property ownership records. Efforts have been under way in a number of African countries to create digital databases through conversion of existing maps into digital format. In Botswana, for example, the Department of Town and Regional Planning has developed a digital database to support land use compliance in Gaborone. Likewise, in Lesotho, the Mapping Agency has been engaged in large-scale digital mapping for urban areas. In most countries, however, meta-data—sets of organized spatial data and information about those data—are in rudimentary stages, making it difficult for potential users to know what data is available. Whereas the most effective data conduits are computer networks and the Internet, these are not yet well developed and reliable on the African continent.

Most of the developing world lies somewhere in between. In India, for example, a high level of knowledge of computerization has fueled explosive demand for digital geographic data in recent years. For example, the new land use plan for the Greater Mumbai (Bombay) Metropolitan Region has been transferred to village maps to enable citizens and other concerned groups to understand the implications of the proposed land uses and to file objections and suggestions. In Chennai (Madras), the government has developed a GIS database for expanding and upgrading the road network, prioritizing links for improvement and providing the framework for an integrated transportation information system. In

Buenos Aires, Argentina

Bangalore, the Development Authority has utilized GIS applications for route planning and tracking of 200 (and eventually 2,000) private buses—using the Global Positioning System (GPS) to monitor the location of the buses.

Major uses of GIS technology include promoting public safety, and reducing the impact of disasters through better-planned evacuation and more efficient management of emergency services. In Mumbai, the government is using GIS technology to build a database and map the various man-made and natural features in space that are directly related to fire hazards, risk assessment, and service delivery. Likewise, the government of Hyderabad has been developing a GIS/GPS-based integrated emergency response management system for Hyderabad City. This project involves the overlay of maps depicting land use, road networks, and various aspects of emergency response, such as journey speeds on all road links, and location and number of fire and police stations and water filling points.

Elsewhere around the world there are many other innovative applications of GIS technology for urban management. The Kuwaiti Ministry of Public Works has launched a large-scale, computerized, in-house Kuwait Infrastructure Maintenance Management System to assist in the maintenance of the public works infrastructure—including roads, bridges, sanitary and storm sewers, and street right-of-way features. The Water Authority of Jordan has employed GIS technology to restructure and remodel the water supply network in the capital of Amman. Under the aegis of a $250 million capital investment program, this project involves completely redesigning the water supply system in the city's congested, densely populated core. In Dhaka, the Government has been utilizing GIS technology to study drainage in Dhaka City. A digital elevation model was established for the catchment area; inundation maps were then produced and various flooding scenarios of the past were modeled. The government of Dhaka has found this technology to be very cost efficient, enabling it to develop sustainable flood alleviation schemes.

For most local governments, in developed as well as developing countries, GIS technology is still in its beginning phases. GIS is typically a single agency operation, mainly within the planning or engineering department. Although its

potential has not been fully realized in many urban settings, GIS technology makes data sharing among departments possible so that, under ideal circumstances, local government agencies can work together on coordinated activities.

In the not too distant future, with improvements in the usability of GIS technology, the number and types of GIS uses and users are likely to expand exponentially. For one thing, the expansion of GIS technology will mean that it need not continue to be associated mainly with "hard" infrastructure and engineering applications. Indeed, planners interested in social issues, who typically have not had the technical skills to use current GIS technology, will be far more capable of using what might be called "second-wave" GIS.

On the negative side, many urban governments throughout the developing world have spent large sums of money — whether their own or from international donors – on GIS technology, with little to show for it, partly because of insufficient training and various bureaucratic obstacles. Moreover, governments in many developing countries are grappling with difficult concerns over intellectual property

rights, privacy issues, pricing policies, and so on. While a local government can now buy a reliable GIS system and obtain a great deal of GIS data through purchase or conversion, there has been no similarly reliable way to create the organizational structures and experienced staff necessary to support an effective GIS. Nevertheless, it is apparent that Geographic Information Systems are beginning to change how many urban governments throughout the world are doing business, as both the complexity of societal interactions and the ease of data manipulation increases. The information age now makes it both possible and desirable to do many things with geo-spatial data that were previously very difficult, in order to gain valuable new insights on a variety of urban planning, policy, and development issues. ●

Dr. Ellen Brennan-Galvin is Chief of the Population Policy Section of the United Nations Population Division in New York City.

UCGIS-HUD Global Urban Indicators Symposium and Congressional Breakfast, Washington, DC, February 6-8, 2001

SUSAN MCDONALD JAMPOLER
University Consortium for Geographic Information Science

The University Consortium for Geographic Information Science (UCGIS), in cooperation with the U.S. Department of Housing and Urban Development (HUD), has awarded grants to five member universities to develop training programs using spatial analysis tools with geographic information systems (GIS) and indicators for measuring urban quality of life in emerging nations.

The five universities — University of Iowa, University of Illinois at Urbana-Champaign, Virginia Commonwealth University, West Virginia University, and University of Wisconsin at Milwaukee – met in Washington, DC, on February 6-7 to plan a research agenda for the year. International partners with these five universities include city governments and higher educational institutions in China, Guatemala, Mozambique, Nepal, Senegal, and South Africa, along with the World Bank and the United Nations Centre for Human Settlements (Habitat).

These universities will spend the next several months working with their international partners to identify the correct indicators, determine appropriate analytical strategies, and design and test training materials. A second symposium will be held in Washington, DC during September, 2001, when the international partners will advise the five U.S. universities on the relevance of each GIS research project for solving urban problems in emerging nations.

UCGIS is interested in identifying additional global partners who are actively involved in working with the United Nations. Through a cooperative effort with the UN Centre for Human Settlements, the Environmental

Systems Research Institute (ESRI), a private company affiliated with UCGIS, will be distributing state-of-the-art software for Geographic Information Systems. ESRI's software can be used to assist local government officials in identifying ways to improve quality of life through collection and analysis of data on urban indicators, and can also be used to train urban officials and constituencies in the use of Geographic Information Systems.

The University Consortium for Geographic Information Science also hosted a Congressional Breakfast for Members of Congress and their staff on February 8, at the U.S. Capitol. Congressman Paul Kanjorski of Pennsylvania and Congressman Jerry Lewis of California sponsored the breakfast. Guests also included representatives from various federal government agencies, and UCGIS professional society affiliate members. Delegates from several UCGIS member institutions demonstrated geographic information technologies and their applications. Topics included: creating livable communities, saving lives and responding to emergencies, protecting the environment, promoting economic development, helping businesses deliver products and services, fighting crime, and supporting scientific research in related disciplines.

For more information, please contact the UCGIS at execdir@ucgis.org.

Susan McDonald Jampoler is Executive Director of the University Consortium for Geographic Information Science (UCGIS) in Leesburg, Virginia.

South African Archbishop Desmond Tutu and United States Professor John Hope Franklin Embark on an International and Intergenerational Journey Towards Interracial Peace

DOUGLAS SPIRO
Wisdom Works

Tutu and Franklin. A Journey Towards Peace documents the historic first encounter between Nobel Peace Prize winner Archbishop Desmond Tutu and renowned historian and Presidential Medal of Freedom recipient Dr. John Hope Franklin. On Goree Island, the infamous former slave port off the west African coast of Senegal, the two meet and discover surprising truths about their personal and their nations' struggles for racial peace. Joined by an international, interracial group of 21 high school students, together they engage in a series of candid encounters on race and begin an emotional journey towards racial reconciliation.

More than a documentary, Tutu and Franklin: A Journey Towards Peace combines the wisdom of the elder statesmen and the vitality of the next generation in unexpected ways to create a new vision for global racial healing. Produced by Wisdom Works, a nonprofit, multimedia company, the two-hour program was shown on public television nationwide in the United States on February 9, 2001 as part of Black History Month.

Executive producer Renee Poussaint, an Emmy award-winning broadcast journalist, established Washington, D.C.-based Wisdom Works with the goal of creating a better future by bringing together the energy of the young with the wisdom of the past. Tutu and Franklin: A Journey Towards Peace evolved from two projects focusing on race and reconciliation in the 21st century that took place on Goree Island.

In December 1998, Wisdom Works extended invitations to Archbishop Tutu and Dr. Franklin to meet for the first time. They agreed to the meeting and to participate in a series of videotaped conversations for a documentary on issues they have fought for their entire lives. To coincide with the historic Tutu and Franklin meeting and to look at new ways to move toward healing, Wisdom Works brought together a diverse group of 21 high school students from the United States, Senegal and South Africa to participate in a separate, intensive week-long program on Goree Island. The program was designed to encourage a new generation of young leaders to focus on international issues of race and ethnicity.

Archbishop Tutu was head of South Africa's Truth and Reconciliation Commission, formed to help his country move on from its painful legacy of racial separatism. Dr. Franklin chaired President Clinton's Advisory Board on Race, set up to launch "a great and unprecedented conversation about race" across the United States. Both commissions issued their final reports in late 1998. Both men were called on to present their respective presidents with concrete proposals for racial healing—proposals that may shape the social realities of their nations and much of the world in the 21st century.

Amid the sadness of Goree Island's distressing past and the beauty of Senegal's sandy shores, Archbishop Tutu, Dr. Franklin, and the students came together to share their personal stories, challenge long-held views, discuss their differences and discover common concerns. Throughout the documentary, personal moments on Goree between Tutu and Franklin are captured and personal histories of the two unfold. Tutu and Franklin: A Journey Towards Peace follows the students across the emotional spectrum from their arrival in Senegal to their final tour of Goree Island's slave house with its eerie cells and the "door of no return." The documentary also explores the students' personal lives, from Dakar, Senegal, to Cape Town, South Africa; from upstate New York, and Chicago, Illinois, to the Native American land of New Mexico.

The Tutu and Franklin meeting, the student leadership program, and their combined conversations are the foundation of the documentary and the Journey Towards Peace Project. This multi-year Project focuses on international, intergenerational, and interracial solutions to the difficult problems facing us in this century. Programs include international satellite video-conferences between the original 21 students and many other students at public schools and post-secondary institutions; ongoing international Internet dialogues on race; community and youth-initiated projects; and the Tutu-Franklin Fellows Program for International Student Race Leadership Training. The Fellows Program includes a series of U.S.-based student diversity conferences and a Tutu-Franklin Fellows Summit to be held in Cape Town, South Africa. •

Douglas Spiro is a Producer at Wisdom Works in Washington, DC, and served as Producer for the recent documentary film, Tutu and Franklin: A Journey Towards Peace.

Dr. John Hope Franklin and Archbishop Desmond Tutu in Senegal

The Summit of the Americas in Quebec City, Canada

ANJA GRAVES

U.S. Department of Housing and Urban Development

The Summit of the Americas is an institutionalized set of meetings at the highest level of government decision-making in the Western Hemisphere. A major Summit is being held in Quebec City, Canada, during April 20-22, 2001. The purpose of this Summit is to discuss common issues and seek solutions to problems shared by the nations of North, Central and South America. The United States delegation is headed by President George W. Bush.

Since the first Summit of the Americas held at Panama City in July of 1956, much has changed in the western hemisphere. With the end of the cold war, the globalization of economies, the development of the North American Free Trade Agreement (NAFTA), and other major trends, the nations of the Americas increasingly share a common set of political, economic, and social goals. The previous Summits at Panama City, Panama in 1956, Punta del Este, Uruguay in 1967, Miami, U.S.A. in 1994, and Santiago, Chile in 1998 have established a solid basis for cooperation throughout the hemisphere to enhance prosperity and quality of life for all citizens in every nation.

The 2001 Summit of the Americas will reflect the steadily growing level of hemispheric consultation and cooperation at many levels of government and across many economic sectors. The Summit's agenda will focus on addressing collective challenges, especially promoting a more equitable distribution of wealth through practical, results-oriented actions. Strengthening democracy, creating prosperity, and realizing human potential have come to be identified as the three main pillars of the work of the Summit in Quebec City.

Poverty and economic disparities persist in the Americas, negatively affecting economic growth and sustainable development. The 2001 Summit will work on improving the property registration framework first established during the Santiago Summit in 1998, by concentrating on regularizing "informal" ownership of real property. The process of formalizing property rights will require governments to modernize their institutional and legal structures so that a free property market can be created for all income segments of the population in each country. Property rights and homeownership are important foundations for equitable, sustainable, and socially responsible economic growth throughout the Americas.

Anja Graves is an Expert in the Office of International Affairs at the U.S. Department of Housing and Urban Development in Washington, DC.

Buenos Aires, Argentina

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