U.S. Department of State
Bureau of Intelligence and Research
Washington, DC

Urbanization and the 21st Century: Communication, Innovation, and Prosperity

Dr. Marc A. Weiss
Chairman and CEO
Global Urban Development

August 16, 2012
World Population (in billions) 8000 BC to 2042

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</thead>
<tbody>
<tr>
<td>Population (in billions)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Years elapsed</td>
<td>1804</td>
<td>123</td>
<td>33</td>
<td>14</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>15</td>
<td>16</td>
</tr>
</tbody>
</table>
TOTAL WORLD POPULATION AND URBAN POPULATION, 1950-2050
(Source: UN population data and projections)

- World Population 9 billion
- Developing Urban 5.2 billion
- Developing Urban 2.6 billion
- Developed Urban 1.1 billion
- Developed Urban 930 million
- Developed Urban 870 million
- Developed Urban 430 million
- Developing Urban 300 million

World Population 6.1 billion

World Population 2.5 billion

World Population 1.9 billion

World Population 6.9 billion

World Population 8 billion

World Population 9 billion
MARC A. WEISS

Metropolitan Economic Strategy: The Key to Prosperity

Metropolitan Economic Strategy is now essential for every nation and urban region to generate sustainable prosperity and quality of life.
Metropolitan Economic Strategy in Brazil
Urban Development and Economic Prosperity

Figure 1. In every nation, the urban share of national income is higher than the urban share of the national population.

Source: Based on the World Bank World Development Report and WB World Development Indicators
Figure 2. In most cities worldwide, the city’s share of national income is higher than the city’s share of national population

Source: Based on UN’s Global Urban Indicators Database
Prague, Czech Republic

Population: 1.2 million

10% of national population

15% of national workforce

>20% of national GDP

>50% of national tourist revenue
“NEW ECONOMY” OF THE 21ST CENTURY:

• Knowledge and Information-Based

• Technology and Communications-Intensive

• Globally Oriented
Why Urban Areas are More Economically Productive

They combine **SPECIALIZATION** and **DIVERSITY**: 

- the critical mass of skills and resources;
- the necessary population density and concentration of market incomes;
- the range of specialized knowledge and institutions;
- the wide diversity of vitally needed facilities and services;
- and the fully developed physical and human infrastructure that are prerequisites for new ideas, products and production methods, technological and organizational innovations, and dynamic economic growth and investment.
KEY ECONOMIC ROLES FOR CENTRAL CITIES AND URBAN REGIONS

• centers of innovation and services, including advanced and highly specialized services
• centers of communication, culture, sports, entertainment, conventions, and tourism
• centers of education, research, and health care
• centers of transportation and trade
• centers of manufacturing and technology development
• market centers
• workforce centers
Investing in Fundamental Assets and Building Dynamic Industry Networks

A good economic strategy consists of two key elements:

1) building from strength — investing in the fundamental assets and activities that make people more productive and places more valuable;

2) generating dynamism — promoting modern, globally competitive industry networks that accelerate the pace of innovation and growth.
PEOPLE are the most vital economic asset in the world

INVESTING IN FUNDAMENTAL ECONOMIC ASSETS:

– Transportation
– Infrastructure
– Education
– Workforce Development
– Research
– Technology
– Markets
– Capital
– Health
– Safety
– Environment and Amenities
– Culture
– Quality of Life
### Figure 2: America's Industry Networks: Selected Economic Indicators

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</thead>
<tbody>
<tr>
<td>Business &amp; Professional Services</td>
<td>103%</td>
<td>2.5%</td>
<td>-32%</td>
<td>10%</td>
<td>$33,399</td>
</tr>
<tr>
<td>Health Services</td>
<td>132%</td>
<td>3.6%</td>
<td>-29%</td>
<td>13%</td>
<td>$30,382</td>
</tr>
<tr>
<td>Entertainment &amp; Tourism</td>
<td>115%</td>
<td>2.6%</td>
<td>13%</td>
<td>-2%</td>
<td>$14,478</td>
</tr>
<tr>
<td>Financial Services</td>
<td>61%</td>
<td>0.3%</td>
<td>16%</td>
<td>34%</td>
<td>$41,016</td>
</tr>
<tr>
<td>Housing &amp; Construction</td>
<td>49%</td>
<td>0.6%</td>
<td>0%</td>
<td>-9%</td>
<td>$30,738</td>
</tr>
<tr>
<td>Medical Products</td>
<td>45%</td>
<td>-0.4%</td>
<td>66%</td>
<td>16%</td>
<td>$43,956</td>
</tr>
<tr>
<td>Transportation &amp; Trade Svs.</td>
<td>41%</td>
<td>2.0%</td>
<td>40%</td>
<td>-16%</td>
<td>$32,095</td>
</tr>
<tr>
<td>Industrial Supplies</td>
<td>31%</td>
<td>0.9%</td>
<td>62%</td>
<td>2%</td>
<td>$36,427</td>
</tr>
<tr>
<td>Printing &amp; Publishing</td>
<td>23%</td>
<td>-0.8%</td>
<td>3%</td>
<td>1%</td>
<td>$33,206</td>
</tr>
<tr>
<td>Electronics &amp; Communication</td>
<td>15%</td>
<td>-1.3%</td>
<td>145%</td>
<td>14%</td>
<td>$40,324</td>
</tr>
<tr>
<td>Transportation Equipment</td>
<td>7%</td>
<td>2.9%</td>
<td>64%</td>
<td>8%</td>
<td>$41,548</td>
</tr>
<tr>
<td>Materials Supplies</td>
<td>2%</td>
<td>-0.3%</td>
<td>60%</td>
<td>3%</td>
<td>$32,103</td>
</tr>
<tr>
<td>Aerospace &amp; Defense</td>
<td>-11%</td>
<td>-8.5%</td>
<td>54%</td>
<td>10%</td>
<td>$44,119</td>
</tr>
<tr>
<td>Agriculture &amp; Food Processing</td>
<td>-17%</td>
<td>-1.5%</td>
<td>75%</td>
<td>18%</td>
<td>$24,441</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>-18%</td>
<td>-3.7%</td>
<td>77%</td>
<td>9%</td>
<td>$43,076</td>
</tr>
<tr>
<td>Industrial Machinery</td>
<td>-20%</td>
<td>-0.1%</td>
<td>86%</td>
<td>-5%</td>
<td>$38,391</td>
</tr>
<tr>
<td>Consumer Goods</td>
<td>-23%</td>
<td>-0.9%</td>
<td>79%</td>
<td>12%</td>
<td>$37,796</td>
</tr>
<tr>
<td>Apparel &amp; Textiles</td>
<td>-28%</td>
<td>-1.7%</td>
<td>117%</td>
<td>0%</td>
<td>$20,754</td>
</tr>
</tbody>
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1998 WASHINGTON, DC ECONOMIC PLAN
INDUSTRY NETWORKS

• Business/Professional/Financial/Association Services
• Hospitality/Entertainment/Tourism/Specialty Retail
• Universities/Educational/Research Institutions
• Biomedical Research/Health Services
• Media/Publications
• Information Technology/Telecommunications
METROPOLITAN ECONOMIC STRATEGY

TWO TYPES OF MOTIVATION

Crisis: Barcelona, Akron

Opportunity: Shanghai, Austin
KEY LESSONS FOR ECONOMIC DEVELOPMENT

LESSON 1: THINK AND ACT STRATEGICALLY
LESSON 2: CREATE COMMON IDENTITY AND SENSE OF PURPOSE
LESSON 3: INVOLVE EVERYONE
LESSON 4: TAKE ACTION AND PRODUCE RESULTS
LESSON 5: BUILD ON THE FUNDAMENTALS
LESSON 6: FOCUS ON THE BIG RESOURCES
LESSON 7: BE YOURSELF
LESSON 8: COLLABORATE WITH AND SUPPORT THE PRIVATE SECTOR
LESSON 9: BE COMPREHENSIVE – LINK BUSINESS AND JOB GROWTH TO PEOPLE AND PLACE
LESSON 10: CONNECT TO THE DYNAMICS OF THE REGIONAL ECONOMY
LESSON 11: WORK WITH AND STRENGTHEN CIVIL SOCIETY
LESSON 12: IMPROVE QUALITY OF LIFE – SUSTAINABILITY AND INCLUSIVENESS
PROTECTING AND SUSTAINING THE PHYSICAL AND NATURAL ENVIRONMENT OF URBAN REGIONS TO PRESERVE AND ENHANCE QUALITY OF LIFE

- encouraging energy efficiency and resource conservation;
- improving clean air and conserving clean water;
- cleaning up and redeveloping toxic and polluted “brownfield” land;
- renovating historic structures and investing in urban cultural heritage;
- maintaining the beauty of natural landscapes and preserving agricultural land;
- increasing the accessibility of biking and hiking pathways and open spaces;
- curbing metropolitan sprawl and traffic congestion;
- reinvesting in older towns, cities, and inner-ring suburbs;
- expanding transit and other pedestrian and public transportation alternatives;
- promoting ecological and heritage tourism;
- developing parks and recreational amenities;
- developing “green” buildings, infrastructure, and communities;
- increasing recycling and the use of renewable energy sources;
- reducing greenhouse gas emissions;
- strengthening community planning and design.
The Economic Value of Quality of Life

“Over the long term, places with strong, distinctive identities are more likely to prosper than places without them. Every place must identify its strongest, most distinctive features and develop them or run the risk of being all things to all persons and nothing special to any…Livability is not a middle class luxury. It is an economic imperative.”

MIT Economics Professor Robert M. Solow
Winner of the 1987 Nobel Prize in Economic Sciences
California: From the Commission on Industrial Innovation to the Green Innovation Index
California’s $56 Billion Green Savings

Per Capita Electricity Sales (not including self-generation)
(kWh/person) (2006 to 2008 are forecast data)

United States

California

2005 Differences
= 5,300kWh/yr
= $165/capita

Per Capita Income in Constant 2000 $

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<tr>
<th></th>
<th>1975</th>
<th>2005</th>
<th>% change</th>
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<tr>
<td>US GDP/capita</td>
<td>16,241</td>
<td>31,442</td>
<td>94%</td>
</tr>
<tr>
<td>Cal GSP/capita</td>
<td>18,760</td>
<td>33,536</td>
<td>79%</td>
</tr>
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Source: Energy Efficiency: The first and most profitable way to delay Climate Change
UCLA Institute of the Environment Oppenheim Lecture February 25, 2008
Arthur H. Rosenfeld, Commissioner California Energy Commission
“Getting Richer by Becoming Greener”
GLOBAL URBAN DEVELOPMENT

Planning for Sustainable Economic Development Across the Americas

Schedule

07th June | Tuesday

08h30 | Registration
09h00 | Opening and Welcome
    Cid Blanco Junior, Cultural Infrastructure Director, Ministry of Culture
    Stewart Sarkozy-Banoczy, Department of Housing and Urban Development
    Washington, DC, USA
    W. Paul Farmer, American Planning Association – Washington, DC, USA
    Luciano Ducci, Mayor of Curitiba
    Edson Ramon, President, Associação Comercial do Paraná (ACP) – Curitiba, Brazil
    Eduardo Guimaraes, President of the Regional Council on Administration, Anhem Curitiba
    Odone Fortes Martins, Coordinating Vice-President of Conex-R, ACP – Curitiba, Brazil
10h00 | Coffee Break
10h30 | Keynote Speaker: A Vision for Urban Sustainability
    Jaime Lerner, Urban Planner
11h30 | Sustainable Economic Development: An Overview
    Panelists
    Marc Weiss, Global Urban Development – Washington DC, USA
    Emilia Queiroga Barros, President, Brazil 2020 Agenda – Lauro de Freitas, Bahia, Brazil
    Moderator: Eduardo Guimaraes, Municipal Secretary for International Relations and Ceremonies – Curitiba, Brazil
14h30 | Case Studies: Planning for Sustainable Economic Development in the Americas – Part 1
    Panelists
    Rob Bennett, Executive Director, Portland Sustainability Institute – Oregon, USA
    Stephanie McLeain, Clean Energy Economy Policy Advisor, Office of the Secretary,
    Department of Natural Resources and Environmental Control, State of Delaware – Dover,
    Delaware, USA
    Gil Polidoro, President, Coordenação da Região Metropolitana de Curitiba (Comec)
    Moderator: W. Paul Farmer, CEO, American Planning Association
16h00 | Coffee Break
16h30 | Case Studies: Planning for Sustainable Economic Development in the Americas – Part 2
    Panelists
    Larry Zinn, Chairman, San Antonio Green Jobs Leadership Council – San Antonio, Texas, USA
    Paul Krukko, President and CEO, SPARK (former Chief Development Officer of the City of San
    Jose, and current Secretary-Treasurer of the International Economic Development Council) – Ann
    Arbor, Michigan, USA
    Ken Heatherington, Executive Director, Southwest Florida Regional Planning Council
    Fort Myers, Florida, USA
    Moderator: Rodrigo Rocha Loures, President, Industrial Federation for the State of Parana (FIEP) – Curitiba, Brazil
18h00 | Cocktail Reception
Singapore: a model for sustainable development?

As a pioneer in sustainable development, Singapore has been approached by the World Bank to provide technical assistance on urban planning in neighbouring countries. Vicente Carbona analyses Singapore’s successful development and reveals the latest initiatives in the city-state.
World Bank

Eco² Cities

Ecological Cities as Economic Cities

Hiroaki Suzuki
Arish Dastur
Sebastian Moffatt
Nanae Yabuki
Hinako Maruyama
Sustainable Economic Development Strategies generate substantial economic and employment growth and sustainable business and community development by demonstrating that innovation, efficiency, and conservation in the use and reuse of all natural and human resources is the best way to increase jobs, incomes, productivity, and competitiveness.

In addition, Sustainable Economic Development Strategies are the most cost-effective method of promoting renewable energy and clean technologies, protecting the environment, and preventing harmful impacts from climate change.
Sustainability in Business

CONFESSIONS OF A RADICAL INDUSTRIALIST

PROFITS, PEOPLE, PURPOSE—DOING BUSINESS BY RESPECTING THE EARTH

RAY C. ANDERSON

with ROBIN WHITE
Types of Sustainable Businesses

**Clean Tech Businesses**

- Develop and market environmental products and services that are resource efficient and benefit the environment

- Clean Energy Sources
- Energy Efficiency
- Green Production Practices
- Pollution Mitigation, Conservation, and Restoration
- Support Services

**Green Businesses**

- Manage their business enterprises in ways that are resource efficient and benefit the environment
The Four Greens

• **Green Savings** — cutting costs for businesses, families, communities, and governments by efficiently using renewable resources and by reducing and reusing waste

• **Green Opportunities** — growing jobs and incomes through business development and expanding markets for resource efficiency, sustainability, and clean technologies

• **Green Talent** — investing in fundamental assets such as education, research, technological innovation, and modern entrepreneurial and workforce skills, because people are now the world’s most vital green economic resource

• **Green Places** — establishing sustainable transportation and infrastructure, and protecting and enhancing the natural and built environment, to create more attractive, livable, healthy, vibrant, prosperous, productive, and resource-efficient areas and communities.
Green Savings

Exhibit 1

Global GHG abatement cost curve beyond business-as-usual – 2030

Abatement cost
€ per tCO₂e

-100
-90
-80
-70
-60
-50
-40
-30
-20
-10
0
10
20
30
40
50
Residential electronics
Residential appliances
Retrofit residential HVAC
Tillage and residue mgmt
Insulation retrofit (residential)
Cars full hybrid
Waste recycling

Low penetration wind
Cars plug-in hybrid
Degraded forest reforestation
Nuclear
Pastureland afforestation
Degraded land restoration
2nd generation biofuels
Building efficiency new build

15
10
25
15
Organic soil restoration
Geothermal
Grassland management
Reduced pastureland conversion
Reduced slash and burn agriculture conversion

1
0
-5
-10
-15
Small hydro
1st generation biofuels
Rice management
Efficiency improvements other industry

15
0
-5
-10
-15
Electricity from landfill gas
Clinker substitution by fly ash
Cropland nutrient management
Motor systems efficiency
Insulation retrofit (commercial)

25
30
35
38
Gas plant CCS retrofit
Coal CCS retrofit
Iron and steel CCS new build
Coal CCS new build
Power plant biomass co-firing
Reduced intensive agriculture conversion
High penetration wind
Solar PV
Solar CSP

Note: The curve presents an estimate of the maximum potential of all technical GHG abatement measures below €60 per tCO₂e if each lever was pursued aggressively. It is not a forecast of what role different abatement measures and technologies will play.

Source: Global GHG Abatement Cost Curve v2.0

(Pathways to a Low-Carbon Economy, McKinsey & Company, 2009)
$3.6 Trillion Global Business Investment in Green Opportunities since 2007

GREEN TRANSITION SCOREBOARD®

More than $3.6 trillion has already been invested by the private sector in sustainable companies and technologies globally since 2007.

www.greentransitionscoreboard.com
Cape Town, South Africa: “Our Golden Thread”

“It is not a question of choosing global competitiveness or the reduction of poverty — Cape Town will achieve both or neither. Reducing poverty will strengthen global competitiveness, and global competitiveness will permit reduction of poverty through economic growth and job creation.”
Productive Cities and Metropolitan Economic Strategy

Dr. Marc A. Weiss
Chairman and CEO
Global Urban Development

A Theme Paper presented to the United Nations International Forum on Urban Poverty,

In the 21st century the world has become urban, with the majority of the global population living in cities and towns. The fastest rates of urbanization are now taking place in developing countries, where average incomes are the lowest. This means that poverty, historically a rural phenomenon, is becoming an increasingly urban issue, in both the developed and the developing world. At the same time, cities and metropolitan areas are the main generators of economic prosperity, and thus are best positioned to contribute toward the elimination of poverty. The twin themes of this conference, "Productive Cities" and "Inclusive Cities" point toward the solution to this fundamental challenge.

This paper addresses how to make cities more productive, and particularly how to do so in ways that expand jobs and business opportunities, increase incomes, and improve quality of life for low-income families and communities. Such an approach requires viewing cities in their metropolitan regional context, and creating cooperative, pro-active growth strategies that connect and unite the public, private, and civic sectors across the urban landscape. It also depends on including poverty populations and settlements in creating their own prosperity, by treating them not as liabilities, but as human and physical assets to be mobilized for production, income and job generation, and wealth creation, as well as involving them in investment decision-making to ensure an equitable distribution of resources, infrastructure, services, incomes, wealth, quality of life, and economic opportunities.

Traditional poverty alleviation strategies focus on the manifestations of poverty itself. They seek ways to feed, clothe and house poor people. They try to find ways to deliver health care and other services with strained resources. Metropolitan Economic Strategy, on the other hand, addresses the root causes of poverty in a manner that empowers low-income people, and directly engages their own energies in altering their life circumstances, improving the surrounding environment, and contributing to the overall productivity of the region and nation.
An old adage states: “Give a person a fish, and he or she will eat for a day. Teach a person to fish, and he or she can eat for a lifetime.” Public policies for reducing poverty reflect these two approaches, providing either subsidies or training. But what if most low-income people are already “fishing” by working diligently to produce and distribute goods and services, yet they simply are not earning enough? If this is the real problem, then it calls for comprehensive solutions based on “Inclusive Economic Development Strategies” with mainstream society actively supporting the efforts of low-income people to enhance their incomes, productive capabilities, and entrepreneurial opportunities. Shack/Slum Dwellers International (SDI) is launching the Community Productivity Project (CPP) together with the United Nations and Global Urban Development, an international non-profit organization founded on the principle of “Treating People and Communities as Assets.” The CPP is designed to establish a new policy paradigm by documenting how productive low-income people are, how hard they work, how much value they create, and the close relationships of their economic activities to the formal economic system.
For more information,

please visit the GUD website:
www.globalurban.org

e-mail me at:
marcweiss@globalurban.org