Demographically and socially the world is now urban. Officially over half of the world’s population is now classified as “urban.” Because of the high degree of complexity, flexibility and mobility in the movement of people, goods, services and capital around the world, distinctions between “urban” and “rural” are meaningless. For all intents and purposes cities are the essential driving force for global economic development.

the planet is now an urban world
From the time of the industrial revolution until the end of the 20th century the spatial shape of cities and their surrounding metropolitan regions could be guided by a range of social and economic considerations that excluded a concern for economizing on the use of energy, especially in transportation.
The design of urban spaces, until very recently, was predicated on the belief that the land, sea and air could absorb and either recycle or contain all the waste products of an urban and industrialized civilization.

The environment is no longer a "free good"
The essence of urbanization is the ability of a dense network of water, sanitation, power and transport infrastructure to sustain a dense pattern of living and working. The need for such infrastructure has now reached crisis proportions in the world's most rapidly growing cities which are located in the Global South.

**urban infrastructure is sorely lacking**

Principle 4
the local level is key in finding solutions

Nation’s are only as vibrant as their cities. Too much of our thinking about the world’s problems is framed in the agglomeration of nation-states. Everyday reality is local even as it is increasingly driven by global economic considerations as these are manifest only at the local level. It does not matter whether the local level is rural, peri-urban; all are essentially defined by urban values.
Nairobi Regional Project [2005-2010]

Funded by the Volvo Research and Educational Foundations

Photo: J. Touber, 2005
Our principle partnership is with the University of Nairobi’s Department of Urban and Regional Planning (DURP).

Together we have created a **pilot project within the municipality of Ruiru, a satellite city of Nairobi**, to demonstrate an effective model of comprehensive urban planning that can operate at the metropolitan scale.

Because there is a local consensus about the urgent necessity for **metropolitan planning**, we believe that positive outcomes in Ruiru will help in the successful creation of the **metropolitan transport and land use planning processes** that are now beginning in and around Nairobi and in other parts of Kenya.
MDGs Workshop [September 2005]

Funded by the Rockefeller Foundation
In September, 2005, CSUD organized a workshop in New York on achieving the Millennium Development Goals in the cities of middle-income countries with the Ministers of Cities and Housing from Brazil and South Africa and ministerial representatives from India, Chile, and Mexico.

The workshop focused on how to secure the financial resources needed to reach the Millennium Development Goals, with special reference to the rapidly growing numbers of urban poor and the need for improving the living conditions of existing slum dwellers (Target 11).

Participants included Lindiwe Sisulu, Minister of Housing of South Africa’s Minister and Marcio Fortes de Almeida, Minister of Cities of Brazil.
World Habitat Day [October 2005]

Funded by the Rockefeller Foundation
In October 2005 CSUD organized the official U.S. observance of World Habitat Day with UN-HABITAT and Habitat for Humanity at Columbia University with support from the Rockefeller Foundation.

World Habitat Day is observed yearly to reflect on the state of human settlements, especially the living conditions of the urban poor and their basic right to adequate shelter.

UN delegates, donors, local community leaders, Columbia University faculty and students joined CSUD and its partners for the observance, which featured addresses by Reverend Calvin O. Butts, Rockefeller Foundation president Judith Rodin and others.
Global Urban Summit [July 2007]

Funded by the Rockefeller Foundation

Photo: J. Touber, 2003
The 5 Principles of Projects Organization

Global Urban Summit [July 2007]

Four one-week meetings held last July at the Foundation’s Bellagio Conference Center were dedicated to addressing the vulnerabilities of the urban poor in the Global South.

Topics:

- **Week 1**: Financing shelter, water and sanitation
- **Week 2**: Building climate change resilience
- **Week 3**: Improving urban population health systems
- **Week 4**: Reorienting planning and design pedagogy and practice for the 21st century

Participants included representatives from:
- Community groups/NGOs
- Local governments
- Leading researchers and academics
- International organizations, finance institutions and private equity groups
- Philanthropic organizations
- Media
Potential Impact of Congestion Pricing on Northern Manhattan, nyc [2008]

Funded by the Ford Foundation for WE ACT

Urban Design Lab at the Earth Institute, 2008
Park and Ride Effect?
Increased Pressure on the already saturated transit system

<table>
<thead>
<tr>
<th>Subway Route</th>
<th>1999 Ridership</th>
<th>1999-2006 Ridership</th>
</tr>
</thead>
<tbody>
<tr>
<td>191st St.</td>
<td>25%</td>
<td>27%</td>
</tr>
<tr>
<td>181st St.</td>
<td>121%</td>
<td>43%</td>
</tr>
<tr>
<td>157th St.</td>
<td>27%</td>
<td>19%</td>
</tr>
<tr>
<td>145th St.</td>
<td>43%</td>
<td>19%</td>
</tr>
<tr>
<td>137th St.</td>
<td>19%</td>
<td>28%</td>
</tr>
<tr>
<td>125th St.</td>
<td>19%</td>
<td>6%</td>
</tr>
<tr>
<td>116th St.</td>
<td>28%</td>
<td>18%</td>
</tr>
<tr>
<td>110th St.</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>103rd St.</td>
<td>18%</td>
<td></td>
</tr>
</tbody>
</table>

1 30% increase (between 191st and 103rd St.)

Source: Ridership data provided by NYC Transit from Urban Design Lab at Columbia University, 2008
Cross-Cutting Initiative [2008-2009]

Image from the movie "The Day after Tomorrow" Property of Fox

Funded by the Earth Institute
The Center for Sustainable Urban Development, together with the Center for Hazards and Risks Research, is commissioning a set of white papers that lay out the scope of inter-institutional collaboration on topics grouped around urbanization. The papers will be delivered at a conference to be organized by the two centers and published in a subsequent refereed volume.
Managing Risk of a Changing Climate for Sustainable Development of Asian Cities
Managing Risk of a Changing Climate for Sustainable Development of Asian Cities

**Goals:**
In partnership with leading regional research centers, urban management authorities and community based organizations in pilot cities, the project aims to:

1. **Develop a suite of tools to measure and spatially map urban climate risks on a 5-30 year timescale.**

2. **Formulate strategies to build resilience to climate change impacts through innovations in risk transfer financing, climate smart infrastructure investments, and improved land use and spatial planning which include the needs and address the increased vulnerabilities of the urban poor.**

**Project Proposal Partners:**
International Research Institute for Climate and Society and the Center for Sustainable Urban Development
Earth Institute, Columbia University
*with*
All India Disaster Mitigation Institute, Gujarat, India
Institute for Strategic Planning and Policy Studies, University of Philippines
Institut Pertanian Bogor, Indonesia
Leveraging networks

Legend
- VREF CoEs
- Academic Collaboration
- Foundations
- VREF CoEs with collaboration
- UN Agencies
- State/Para-Statal Agencies
Thank you
http://www.earth.columbia.edu/csud

Photo: J Touber, 2006