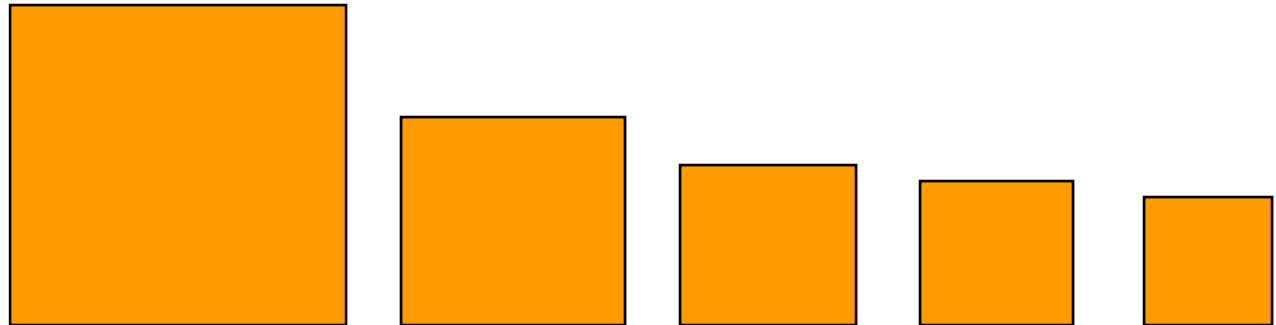


CSUD

Center for Sustainable Urban Development
The Earth Institute at Columbia University

Elliott Sclar

Berkeley, CA
May 19, 2008

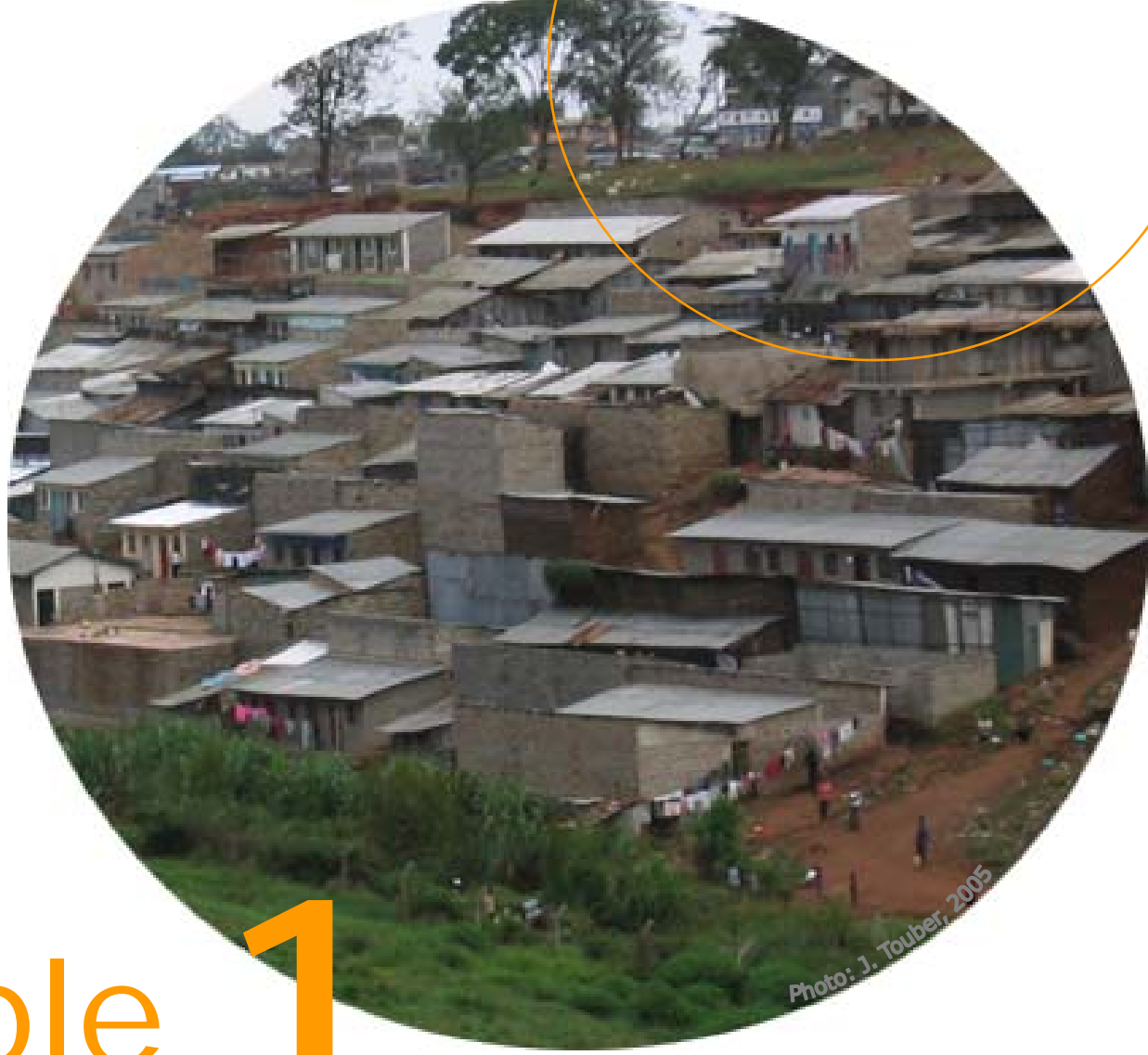


Demographically and socially the world is now urban.

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.

principle 1

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 era of inexpensive **energy** is over



Photo: J. Touber, 2006

principle 2

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.

principle 3

the **environment** is no longer a “free good”



Photo: G. Carolini, 2005

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



Photo: J. Touber, 2005

principle 4

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**.

the **local level** is key in finding solutions



Photo: J. Touber, 2006

principle 5

MDGs workshop
World Habitat Day
Congestion Pricing Study
Cross-Cutting Initiative



New York

Global Urban Summit



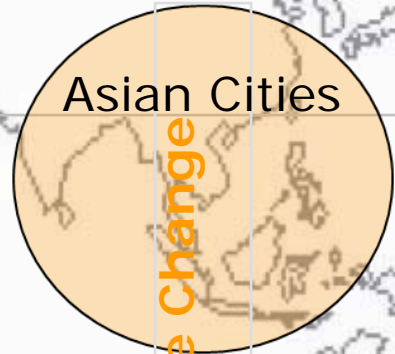
Bellagio

Nairobi Regional Project

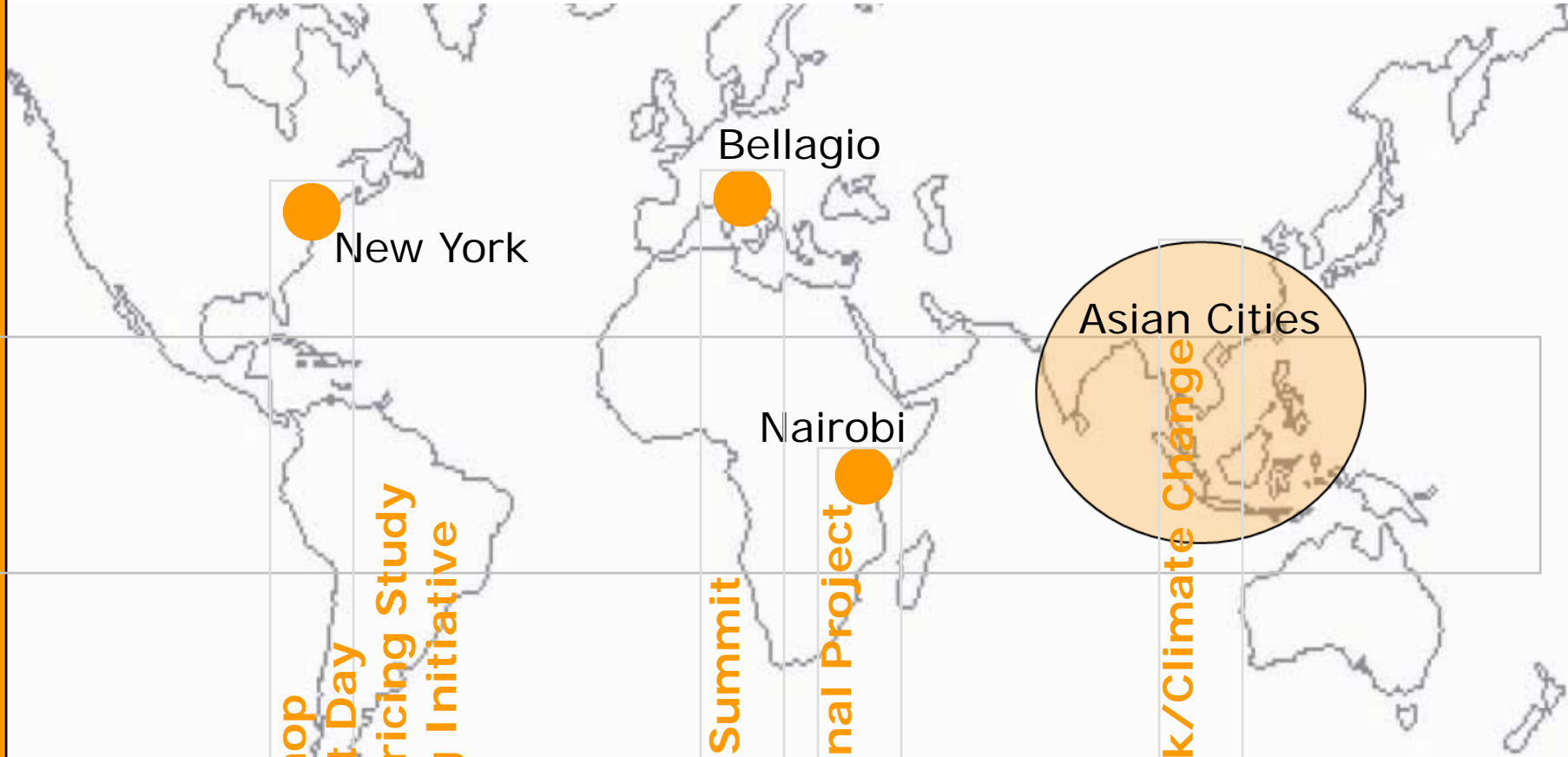


Nairobi

Managing Risk/Climate Change



Asian Cities

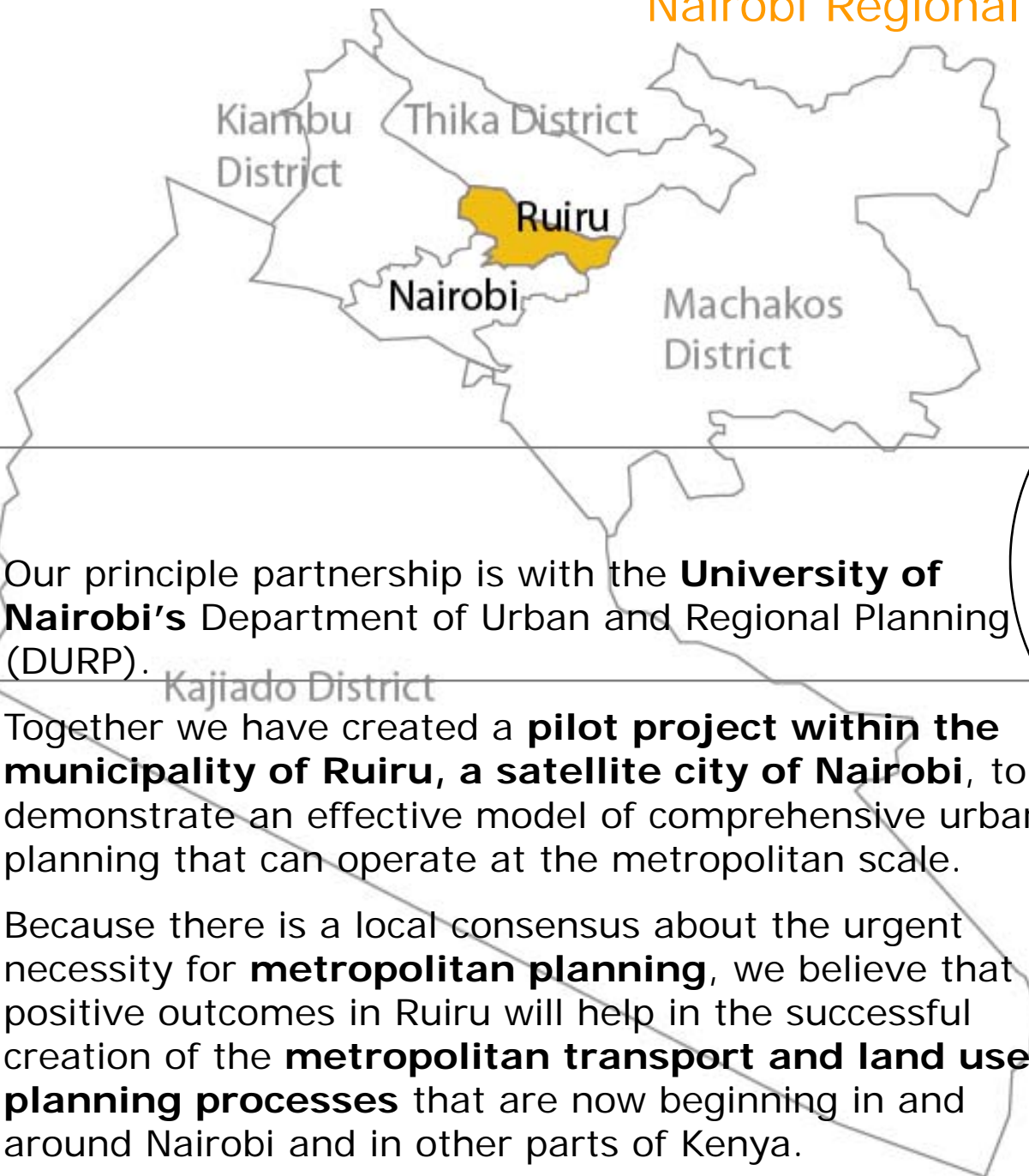


Nairobi Regional Project [2005-2010]



Photo: J.Touber, 2005

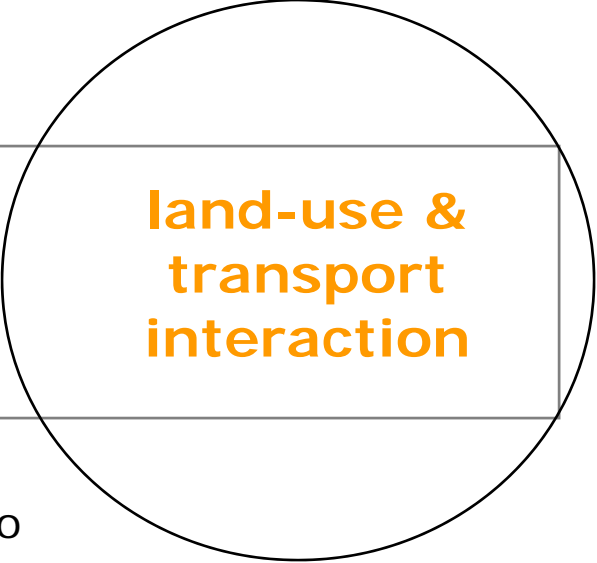
Funded by the Volvo Research and Educational Foundations



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.



land-use & transport interaction

MDGs Workshop [September 2005]



Photo: J Touber, 2005

Funded by the Rockefeller Foundation

Millennium Development Goals Workshop [Sept 2005]

organization

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.

projects

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).

 Mexico

Participants included Lindiwe Sisulu, Minister of Housing of South Africa's Minister and Marcio Fortes de Almeida, Minister of Cities of Brazil.

 Chile

 Brazil

 South Africa

 India

**financing
housing for
the MDGs**

the 5 principles

World Habitat Day [October 2005]



Photo: UP Studio Accra 2003

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.

**housing
as a
human right**



Global Urban Summit [July 2007]



Photo: J.Touber, 2003

Funded by the Rockefeller Foundation

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 3


Improving urban population health systems

Week 2

Building climate change resilience

Week 4

Reorienting planning and design pedagogy and practice for the 21st century



**vulnerabilities
of urban
poor**

Participants included representatives from:

Community groups/NGOs
Local governments
Leading researchers and academics
International organizations, finance institutions and private equity groups
Philanthropic organizations
Media

Northern Manhattan

Potential Impact of Congestion Pricing on Northern Manhattan, nyc [2008]



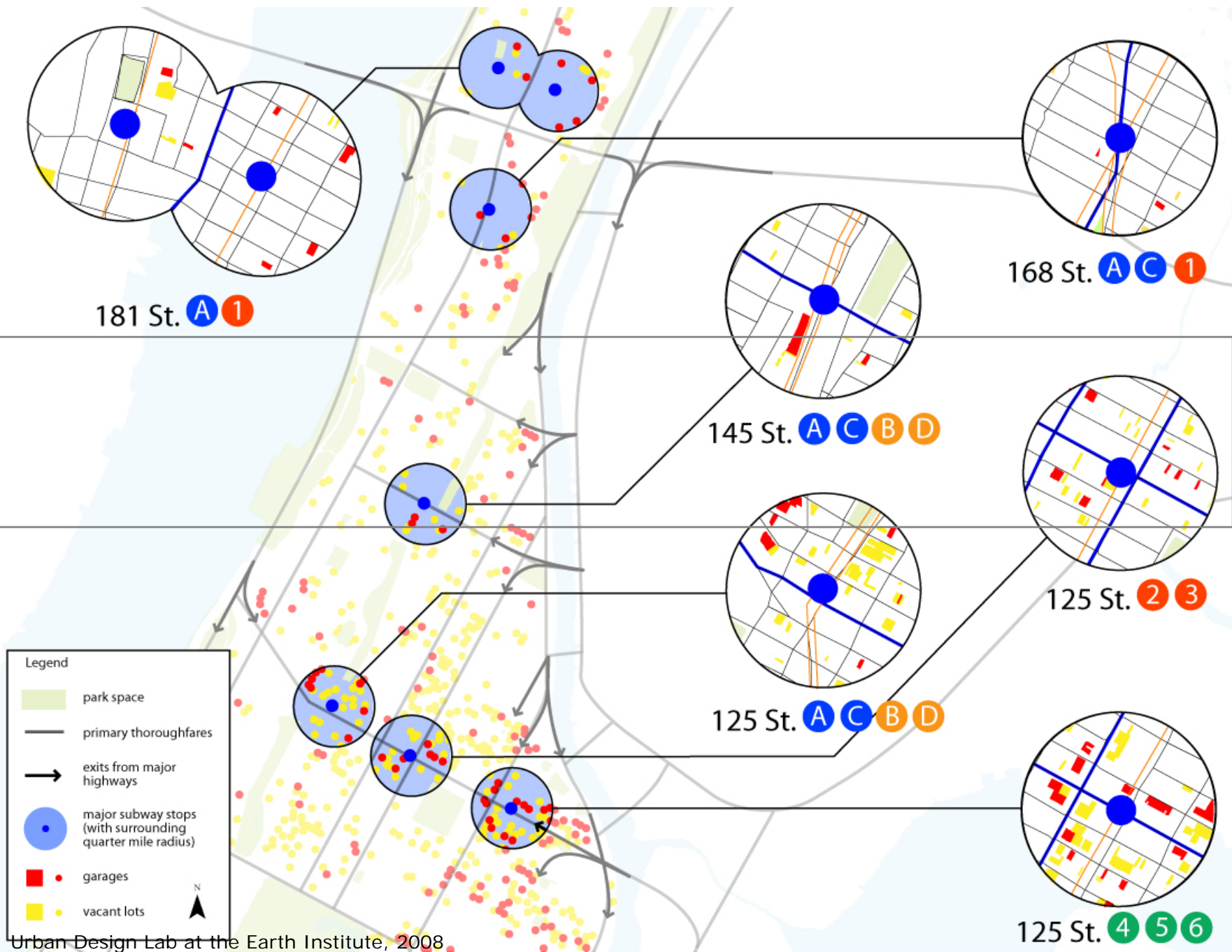
Funded by the Ford Foundation
for WE ACT

Park and Ride Effect?

organization

projects

the 5 principles



Increased Pressure on the already saturated transit system

organization

projects

the 5 principles

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

1999-2006 Ridership

17% increase
(entire system)
1999-2006 Ridership

1999 Ridership

25%

121%

27%

43%

19%

19%

28%

6%

18%

191st St.

181st St.

157th St.

145th St.

137th St.

125th St.

116th St.

110th St.

103rd St.

1

subway route

Cross-Cutting Initiative [2008-2009]



Image from the movie "The Day after Tomorrow" Property of Fox
Funded by the Earth Institute

Cross-Cutting Initiative [2008-2009] Urbanization in the 21st century

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.

**planning tools
for urban
resilience**



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.**



**urban
risk
management**

Project Proposal Partners:

International Research Institute for Climate and Society
and the Center for Sustainable Urban Development
Earth Institute, Columbia University
with

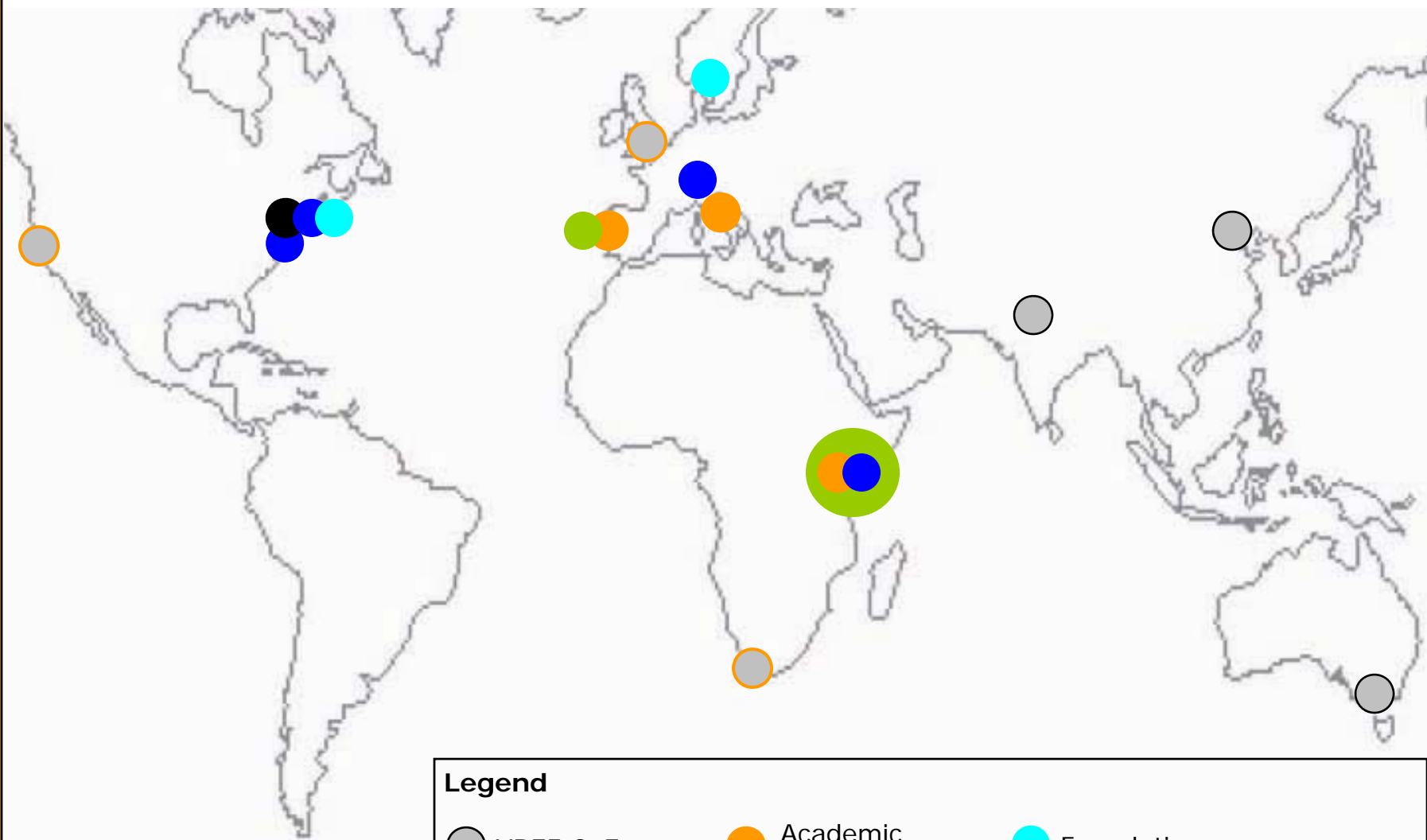
All India Disaster Mitigation Institute, Gujarat, India
Institute for Strategic Planning and Policy Studies, University of Philippines
Institut Pertanian Bogor, Indonesia

Leveraging networks

organization

projects

the 5 principles



Legend

○ VREF CoEs

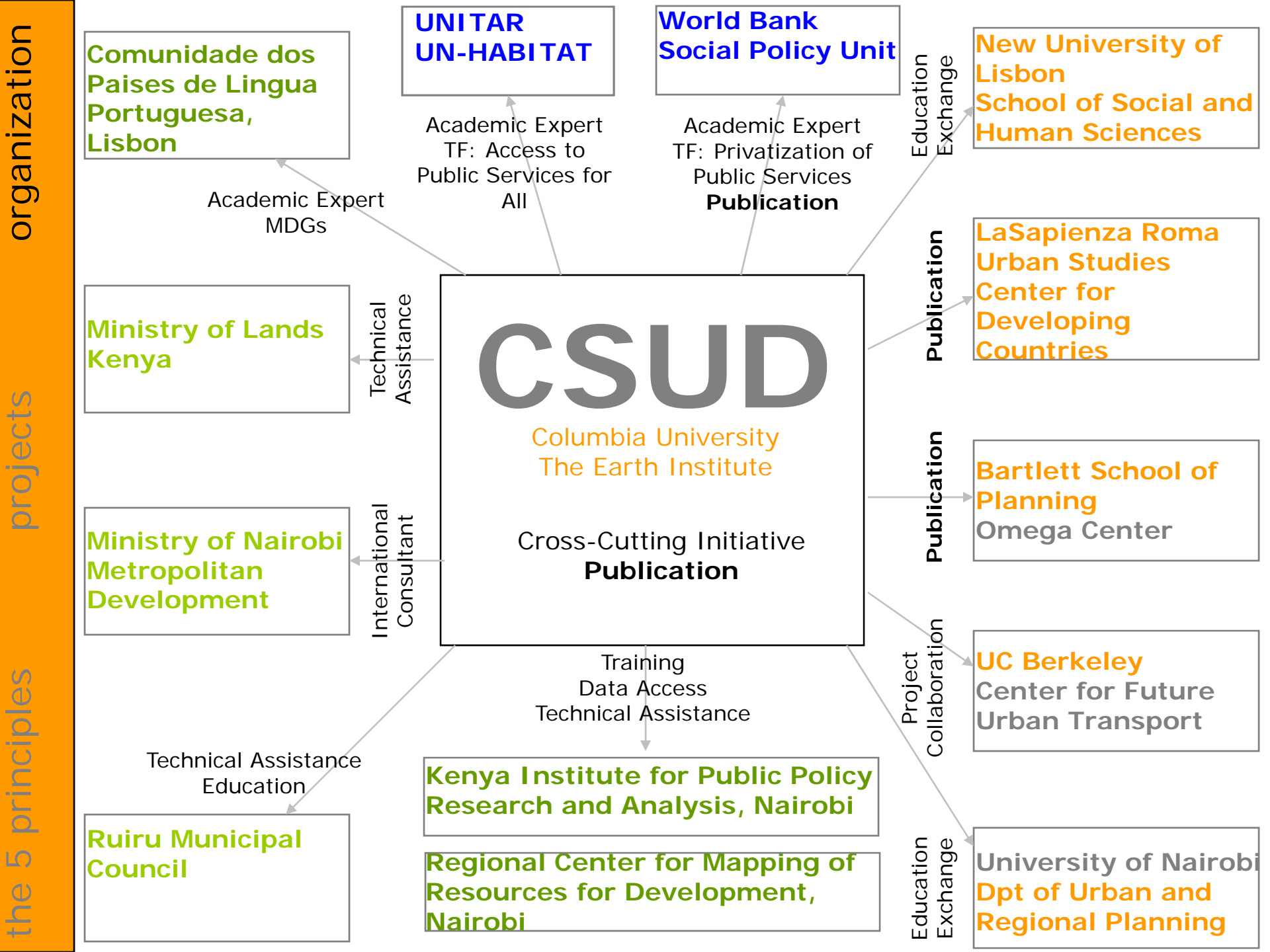
○ Academic Collaboration

○ Foundations

○ VREF CoEs with collaboration

○ UN Agencies

○ State/Para-Statal Agencies



CSUD

Thank you

<http://www.earth.columbia.edu/csud>



Photo: J Touber, 2006

