Secondary CITIES:
Mapping for Resiliency, Human Security and Emergency Preparedness

Dynamic Mapping:
An Introduction to Tools & Technologies

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<table>
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<th>Time</th>
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| 9:00 AM| Overview & Orientation
  Melinda LaTiri (Colorado State University) |
| 9:10 AM| Keynote Address:
  "The Challenge of Mapping Human Geography Data in the Urban Milieu"
  Lee Schwartz, Geographer of the United States Director, Office of the Geographer |
| 9:40 AM| Panel I: Why Dynamic Mapping in Secondary Cities?
  Mark Montgomery (Stony Brook University), Phil Yang (George Mason University),
  Keith Clarke (University of California-SB)
  Moderator: Jason Ur (Harvard University) |
| 10:50 AM| Coffee Break |
| 11:00 AM| Panel II: Case Studies on Dynamic Data Collection and Mapping Projects for Urban Developing Communities
  Reinhard Goethart (MIT), Gabriel Moreno (Harvard University), Kellie Stokes (Yale University),
  Kirstin Miller (Ecocity Builders)
  Moderator: Faith Sternerleb (Colorado State University) |
| 12:10 PM| Lunch |
| 1:10 PM| Tools & Technologies Applied to Humanitarian Aid
  Nathaniel Raymond (HHI, Harvard University) |
| 1:50 PM| Citizen Participation and GIS Use in Urban India
  Rina Ghose (University of Wisconsin-Milwaukee) |
| 2:30 PM| The Use of Smartphones for Dynamic Mapping and Planning of Transit Systems in Africa
  Zachary Patterson (Concordia University, Canada) |
| 3:10 PM| Coffee Break |
| 3:20 PM| Panel III: Solutions, Lessons Learned, and Next Steps for Secondary Cities
  Rina Ghose (University of Wisconsin-Milwaukee), Zachary Patterson (Concordia University, Canada),
  Nathaniel Raymond (HHI, Harvard University)
  Moderator: Melinda LaTiri (Colorado State University) |
| 4:30 PM| Closing Remarks
  Smuly Bitlund (MIT) |
Dynamic Mapping: Tools and Technologies

Process
Practice
Products
Secondary Cities

Urbanisation, 2016

GLOBAL CITY POPULATIONS

- 46.0% Rural
- 23.2% Other urban
- 3.6% Smallest cities
- 5.1% Small cities
- 11.6% Medium cities
- 4.2% Large cities
- 6.4% Megacities

Fewer than 300,000
300,000 to 500,000
500,000 to 1m
1m to 5m
5m to 10m
10m or more

Considering Best Practices
Collaboration
New Partnerships

- Interoperability
- Metadata standards
- Access and sharing
- Language
- Protocols
- Training/Education