Understanding Disaster Risk: Overcoming data scarcity through innovation and open data

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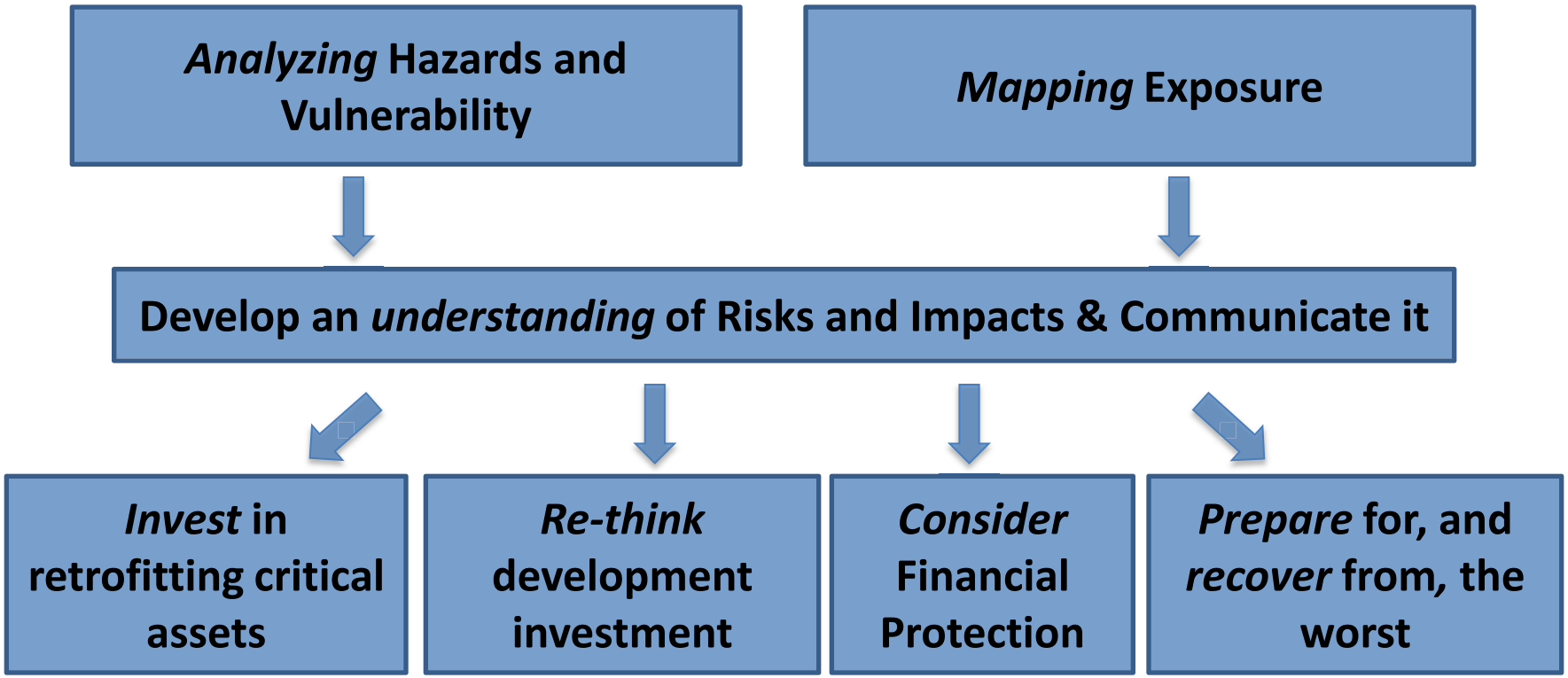
Global Facility for Disaster Reduction and Recovery, World Bank

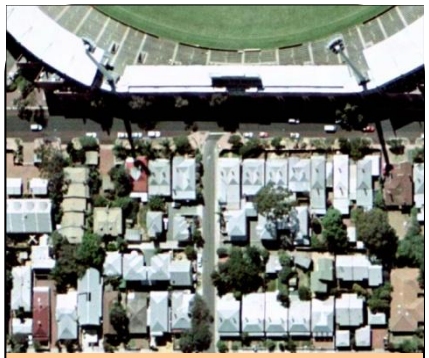
Risk information for All and a Purpose

Innovative tools and methodologies to engage with all stakeholders to promote collaboration, analysis, sharing and USE of risk data and information



Risk information: a data challenge!

Hazard



Exposure

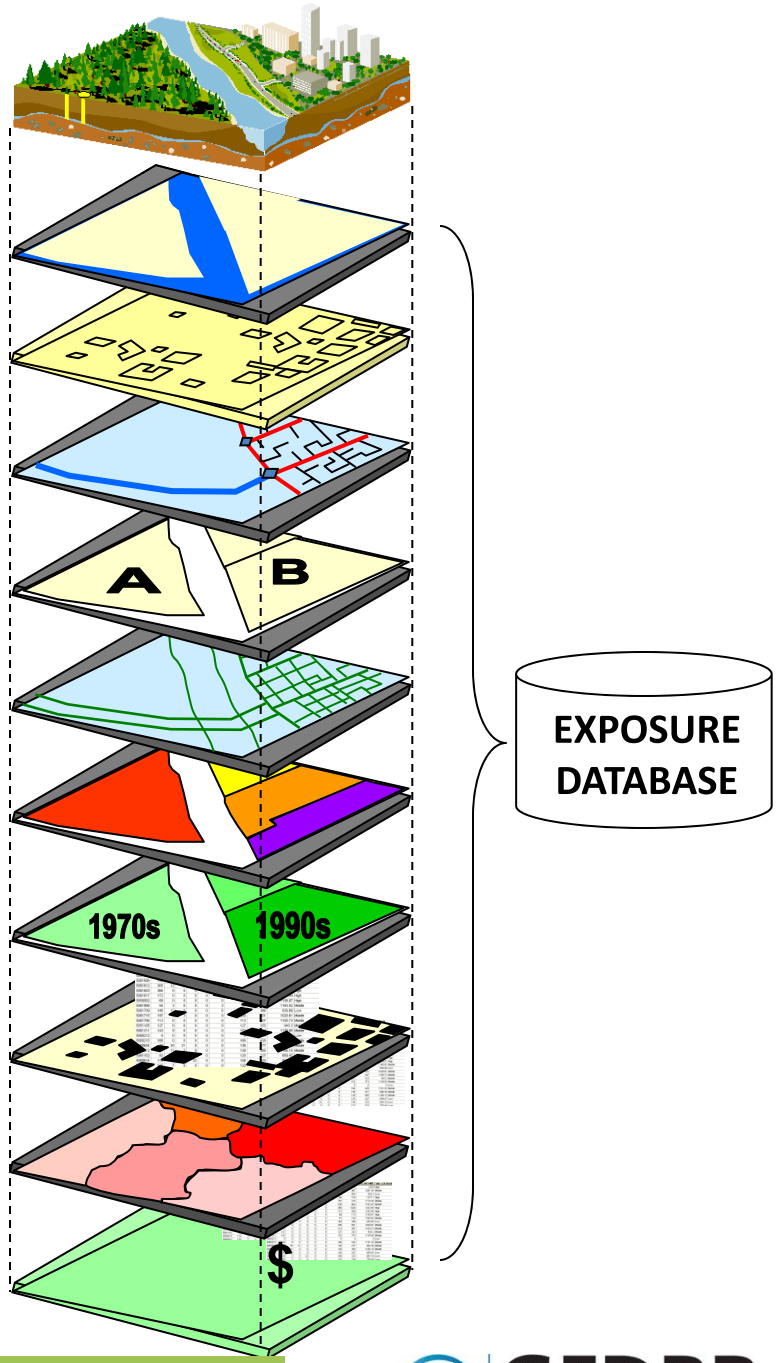
Vulnerability

Fatalities, injuries, displaced persons
Damage to buildings, infrastructure

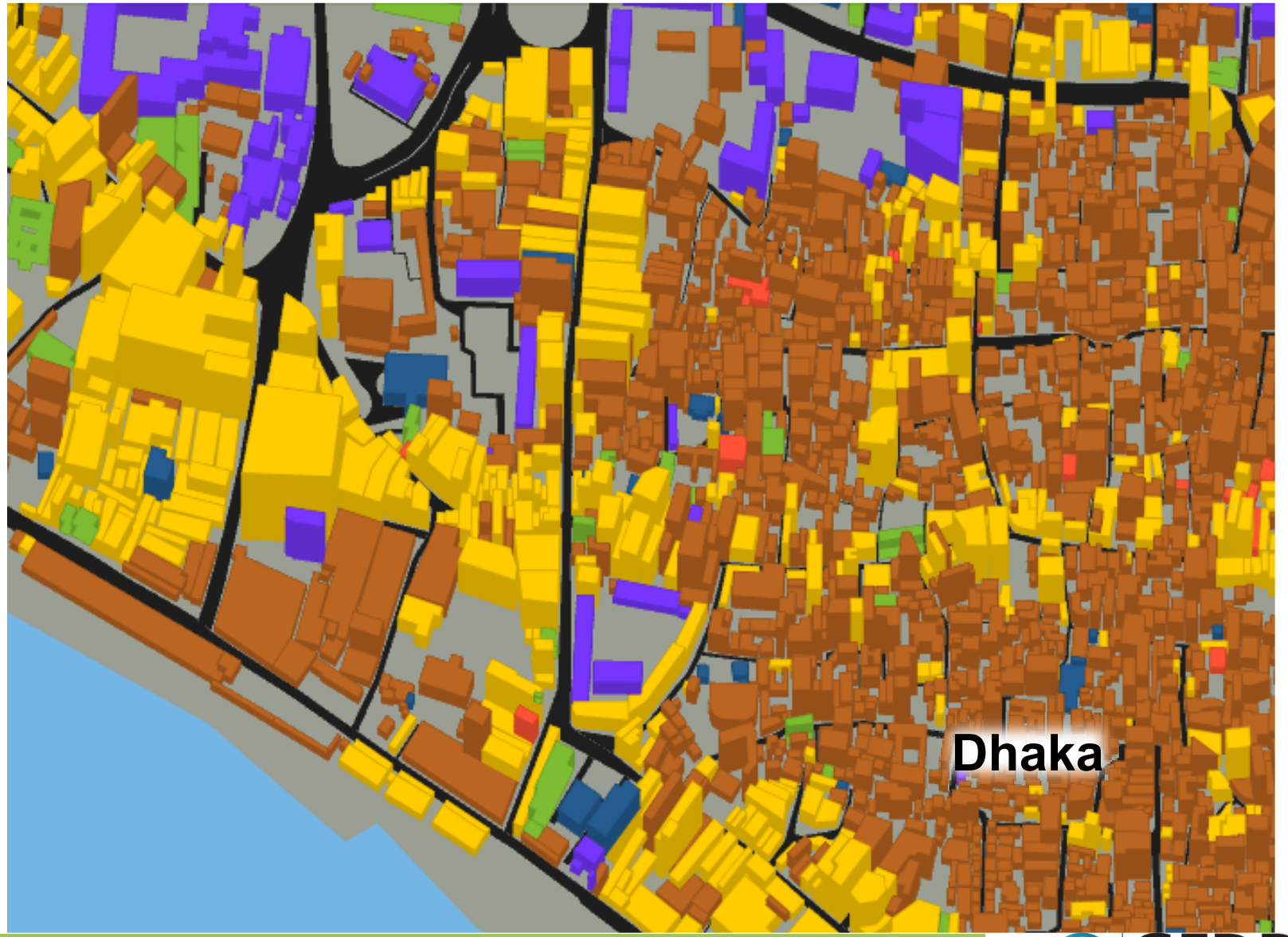
Impact

An example of the challenge….

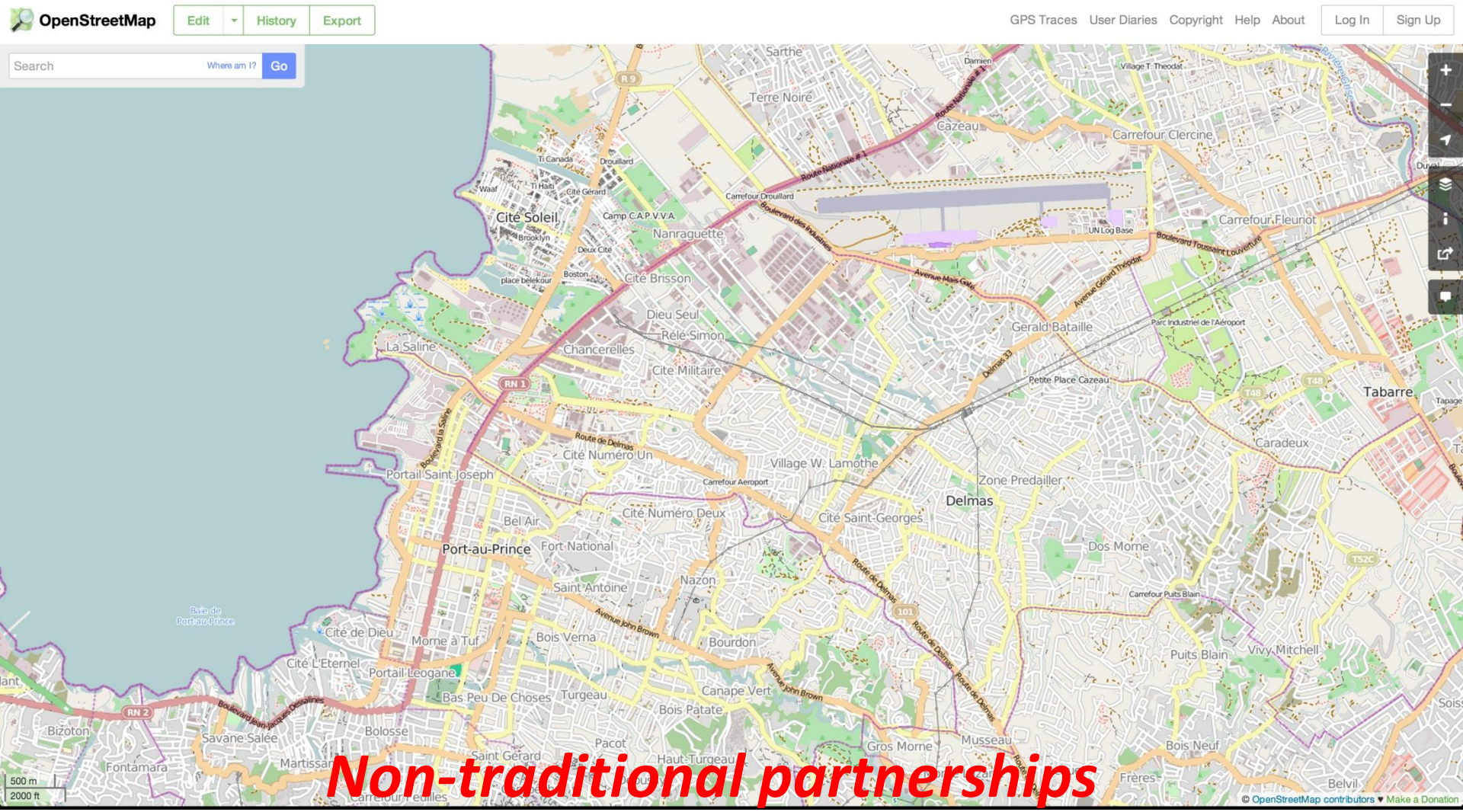
Building and maintaining an integrated, centralised and ***spatially-enabled*** database is the most effective way to manage exposure information



Opening existing data!



Collecting new data… Haiti



Non-traditional partnerships

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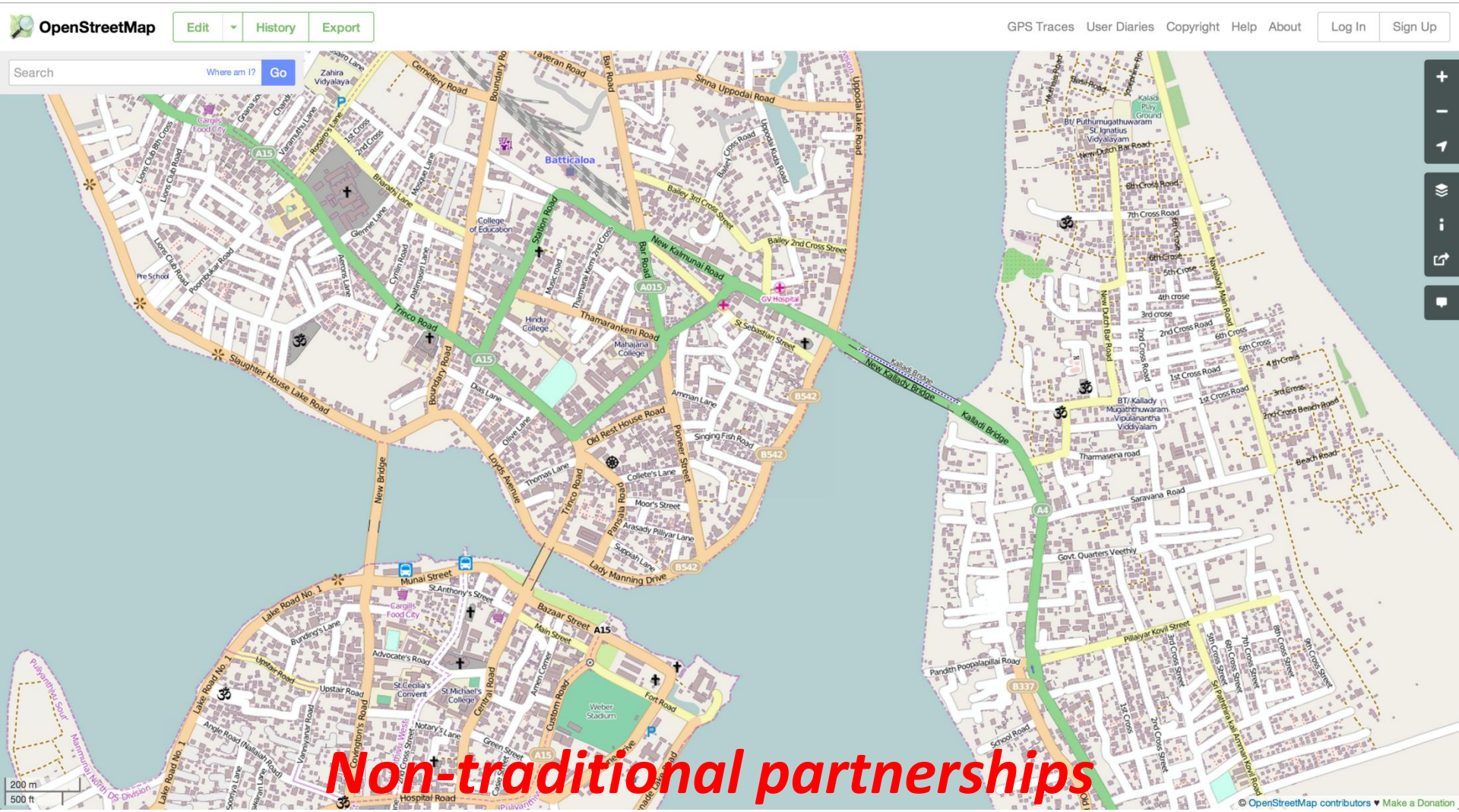
Collecting new data… Sri Lanka



Non-traditional partnerships

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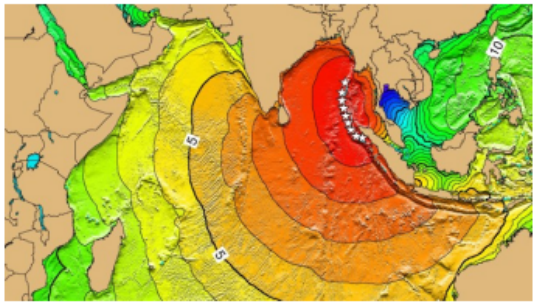
Share it!

RISKINFO Disaster Risk Information Platform
Risk Information for all...

Sign in for extra features

Welcome



Welcome to the Sri Lanka Disaster Risk Information Platform (RiskInfo). The purpose of RiskInfo is to make disaster risk information available to all the stakeholders and the public in order to facilitate disaster risk reduction and recovery efforts. The initiative is led by the Disaster Management Center (DMC) in partnership with UNDP, NGOs and GDFRR Labs. The data sharing platform is built using the open source software GeoNode that is designed to enable collaborative use of geospatial data and maps. To get in touch and get in account to upload data: riskinfo@dmc.gov.lk

MAPS

RiskInfo lets you compose and share maps. **Create** a map with our cartography tool, or **explore** maps shared by others.

Search

Hazard profile maps

Administrative boundaries

Explore maps

Create a new map

Create map

DATA

RiskInfo lets you upload, manage, and browse data. **Search** for data that is valuable to you, or **upload** your own data.

Search

Hazard data

Exposure data

Base data

View all data

Sharing data with all stakeholders

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Embracing the power of open data!

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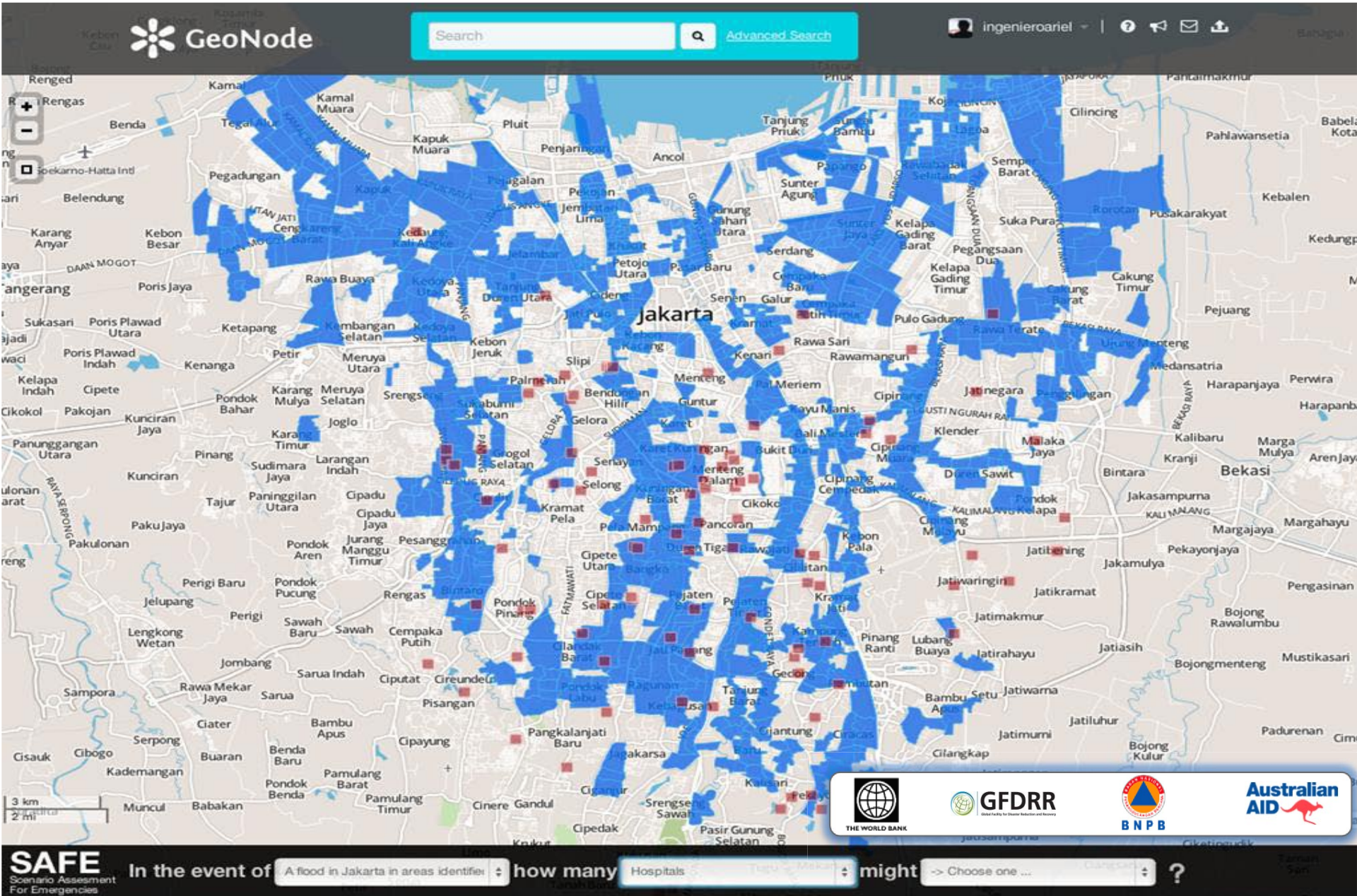
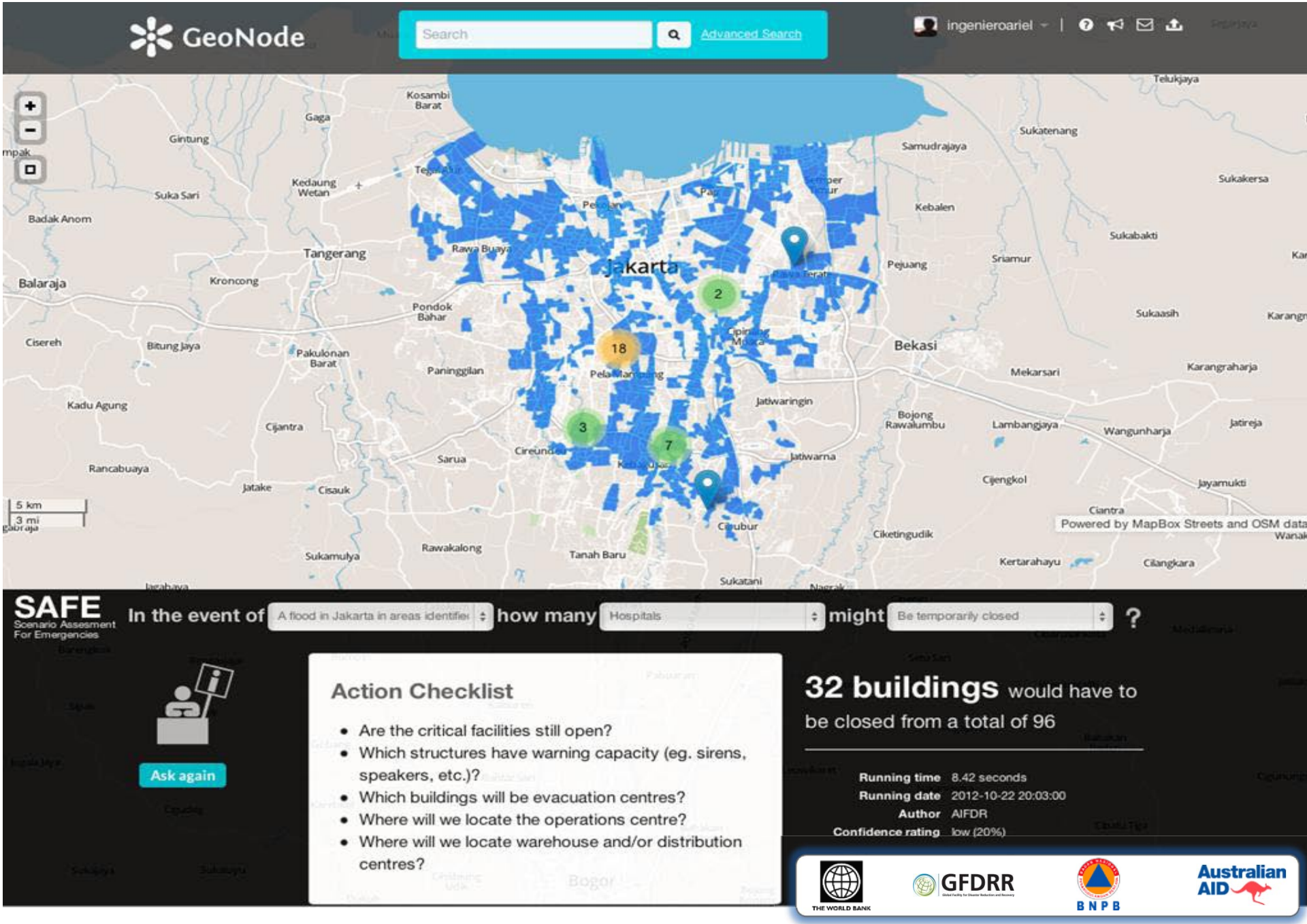
Use it!


GeoNode
Search
Advanced Search
ingenieroariel
Jakarta
3 km
2 mi
THE WORLD BANK
GFDRR
BNPB
Australian AID
SAFE
Scenario Assesment For Emergencies
In the event of
A flood in Jakarta in areas identifie
how many
Hospitals
might
-> Choose one ...
?


GeoNode
Search
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Jakarta
Tangerang
Bekasi
Balaraja
Cisereh
Kadu Agung
Rancabuaya
Jatake
Cisauk
Cijantra
Bitung Jaya
Pakulonan Barat
Kroncong
Pondok Bahar
Paninggilan
Rawa Buaya
Kosambi Barat
Gaga
Gintung
Kedaung Wetan
Suka Sari
Badak Anom
Sukamulya
Rawakalong
Tanah Baru
Cirubur
Ciketingudik
Cijengkol
Jatiwarna
Jatiwaringin
Sarua
Cireundeu
Bojong Rawalumbu
Lambangjaya
Wangunharja
Jatireja
Mekarsari
Karangraharja
Sukaasih
Pejuang
Sriamur
Kebalen
Sukabakti
Sukakersa
Samudrajaya
Sukatenang
Telukjaya
Kertarahayu
Cilangkara
Sukatani
Ciantra
2
18
3
7
5 km
3 mi
Powered by MapBox Streets and OSM data
SAFE
Scenario Assesment For Emergencies
In the event of
A flood in Jakarta in areas identifie
how many
Hospitals
might
Be temporarily closed
?
Ask again
Action Checklist
Are the critical facilities still open?
Which structures have warning capacity (eg. sirens, speakers, etc.)?
Which buildings will be evacuation centres?
Where will we locate the operations centre?
Where will we locate warehouse and/or distribution centres?
32 buildings would have to be closed from a total of 96
Running time 8.42 seconds
Running date 2012-10-22 20:03:00
Author AIFDR
Confidence rating low (20%)
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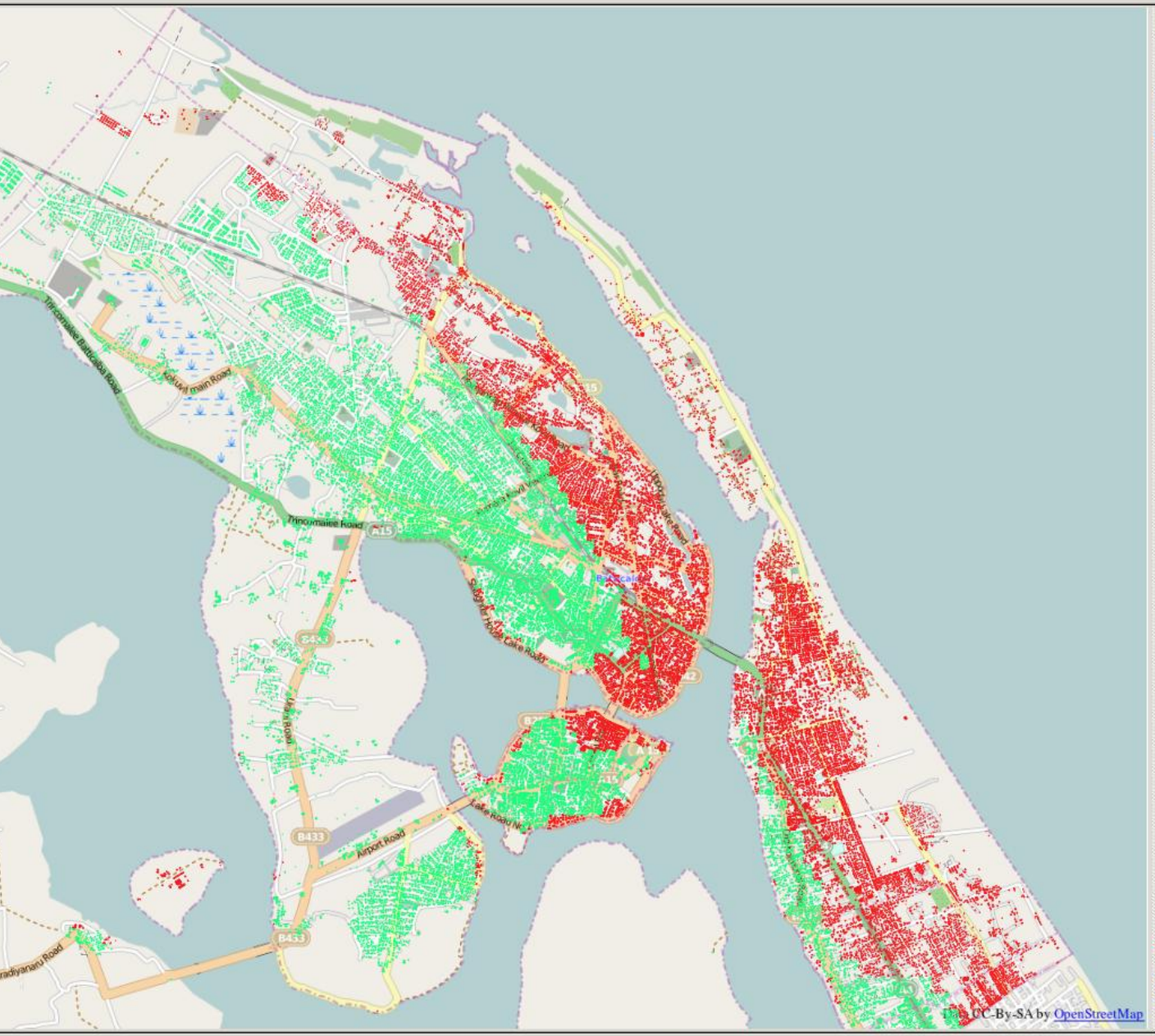
BNPB
Australian AID

Use it!



InaSAFE 2.1.0b0 final

Show question form

InaSAFE

Analysis Results

In the event of *tsunami (comcot model / batticaloa, sri lanka)* how many *buildings* might *be flooded*

Building type	Number flooded	Total
All	15,037	32,955
Breakdown by building type		
Commercial	998	2,000
Government	510	800
Hospital	31	122
Industrial	68	188
Other	570	2,026
Place of worship	489	1,000
Residential	11,909	25,825
School	284	493
Utility	178	501

Action Checklist:

Are the critical facilities still open?

Which structures have warning capacity (eg. sirens, speakers, etc.)?

Which buildings will be evacuation centres?

Where will we locate the operations centre?

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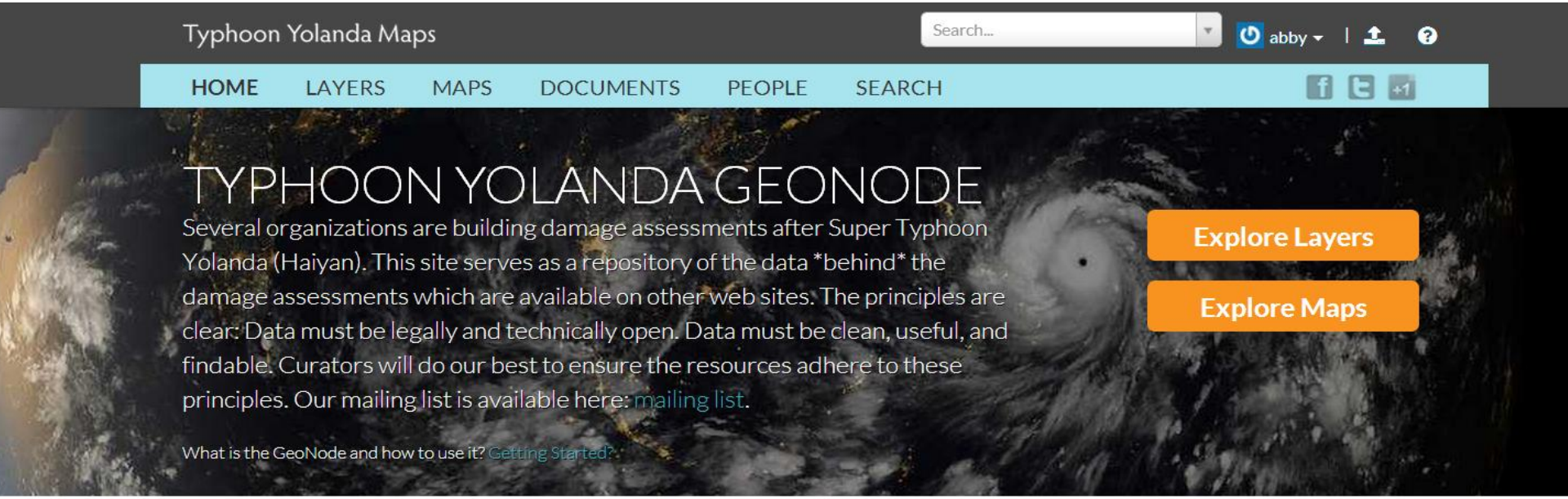
InaSAFE Support

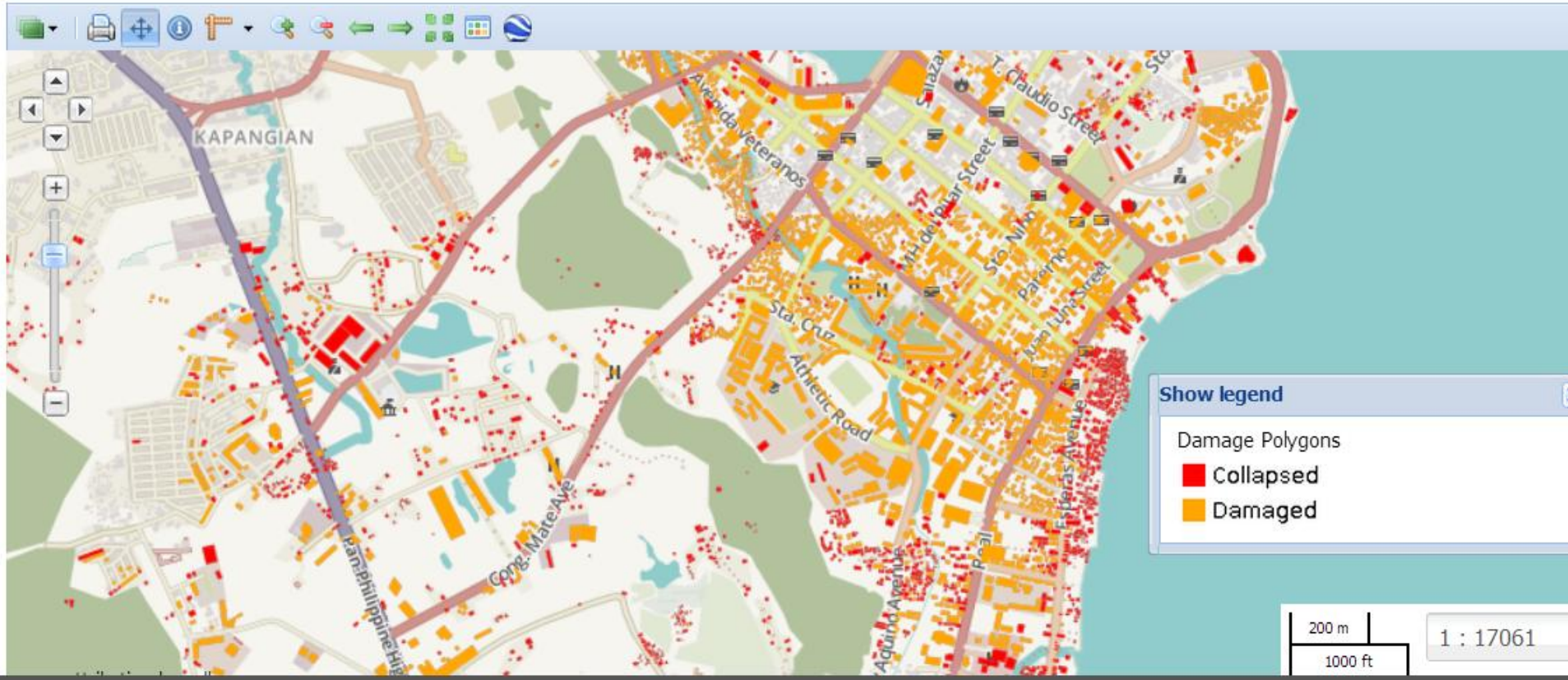
Help About Print ... Run

Collectively sharing data



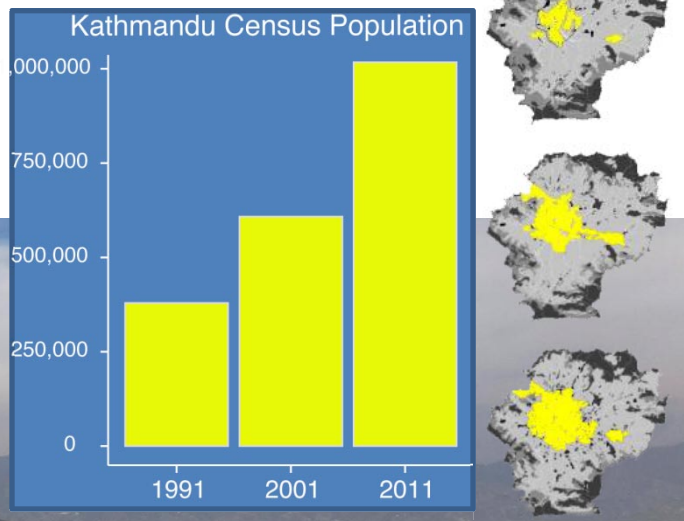
DAMAGE MAP

Download Map | Edit Map | View Map



Modeling Changing Riskscapes in Kathmandu

In partnership with David Lallemant, Stanford University



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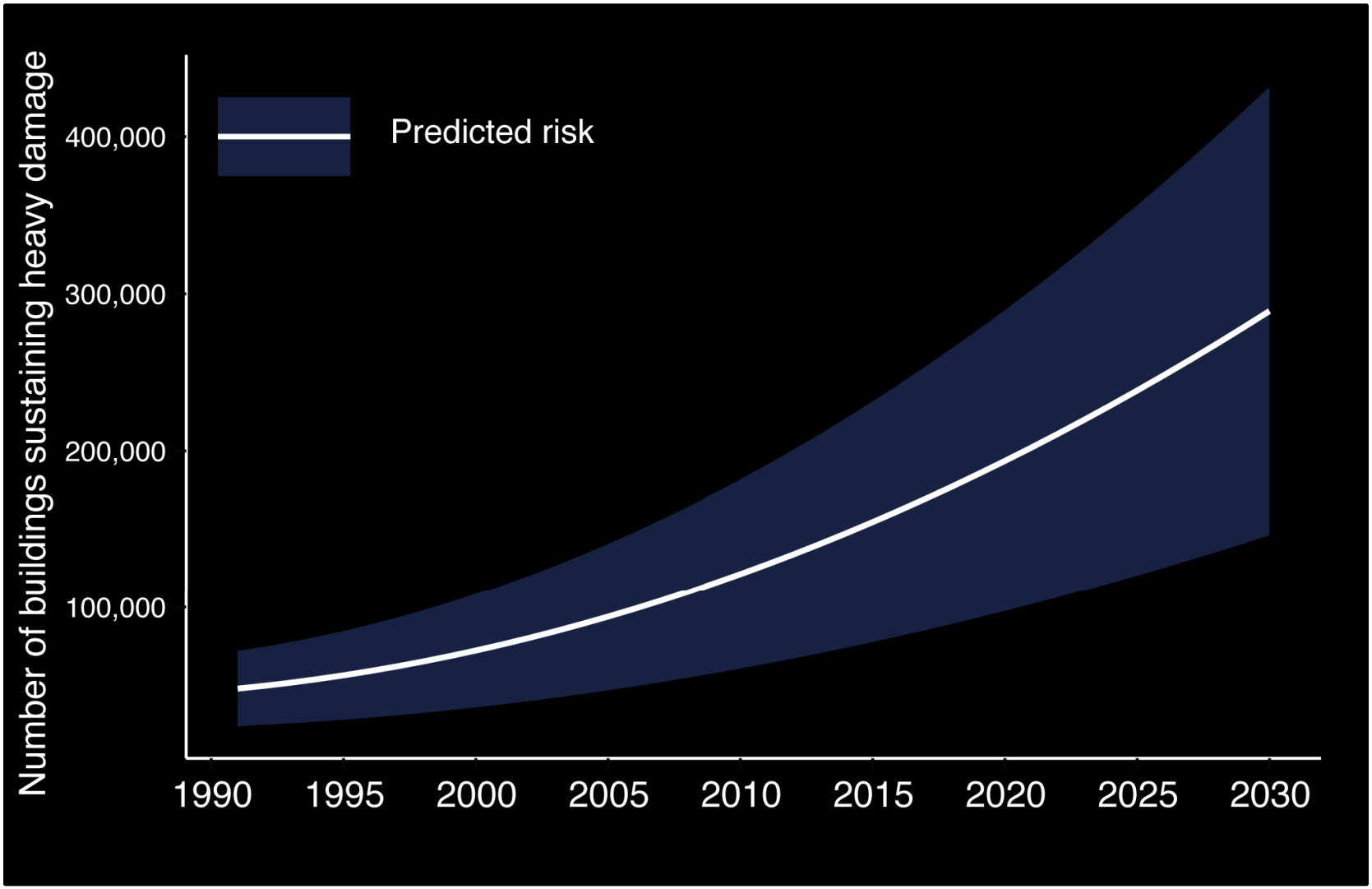
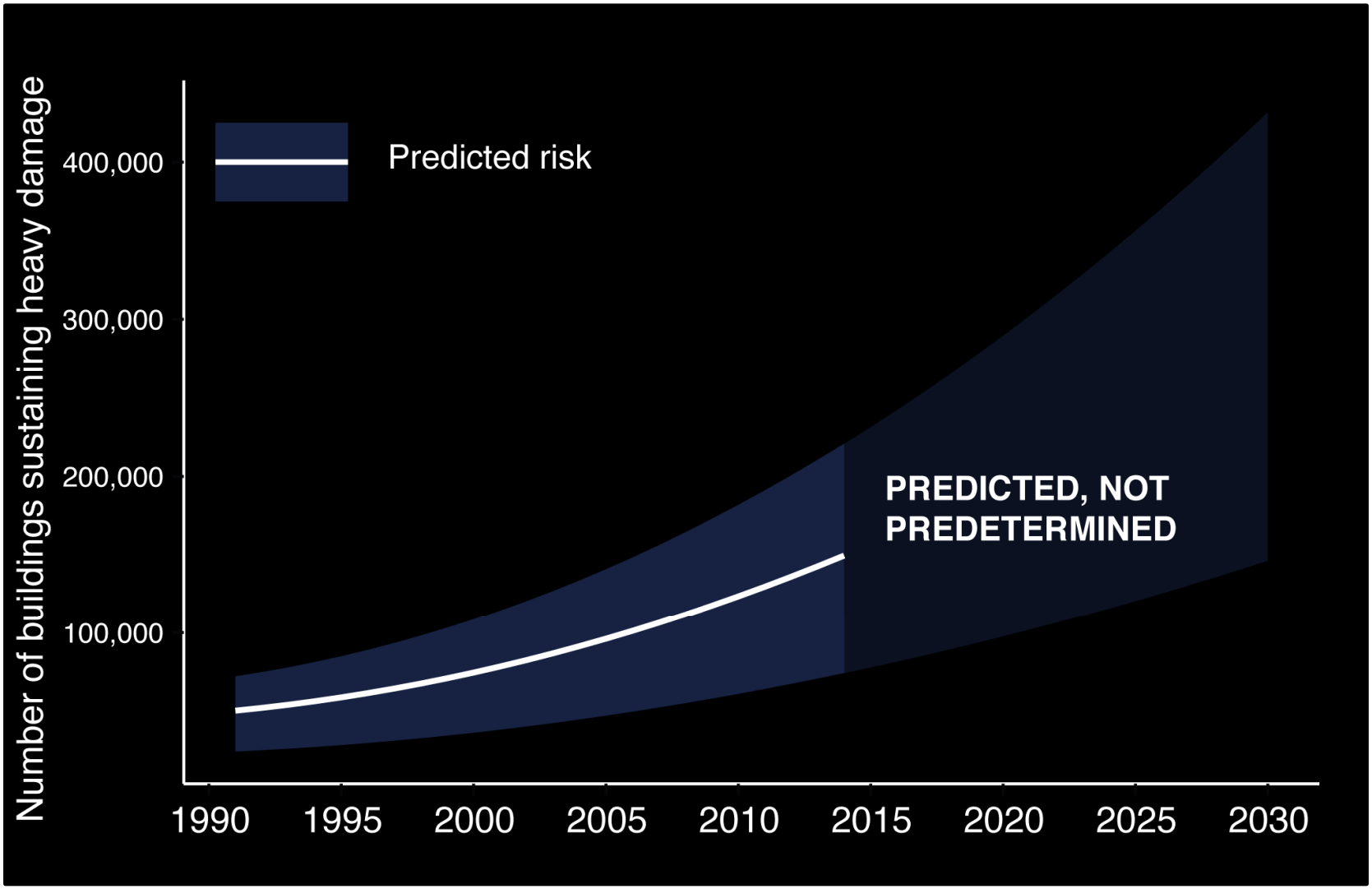
Modeling Changing Riskscapes in Kathmandu



Controlling Changing Riskscapes in Kathmandu



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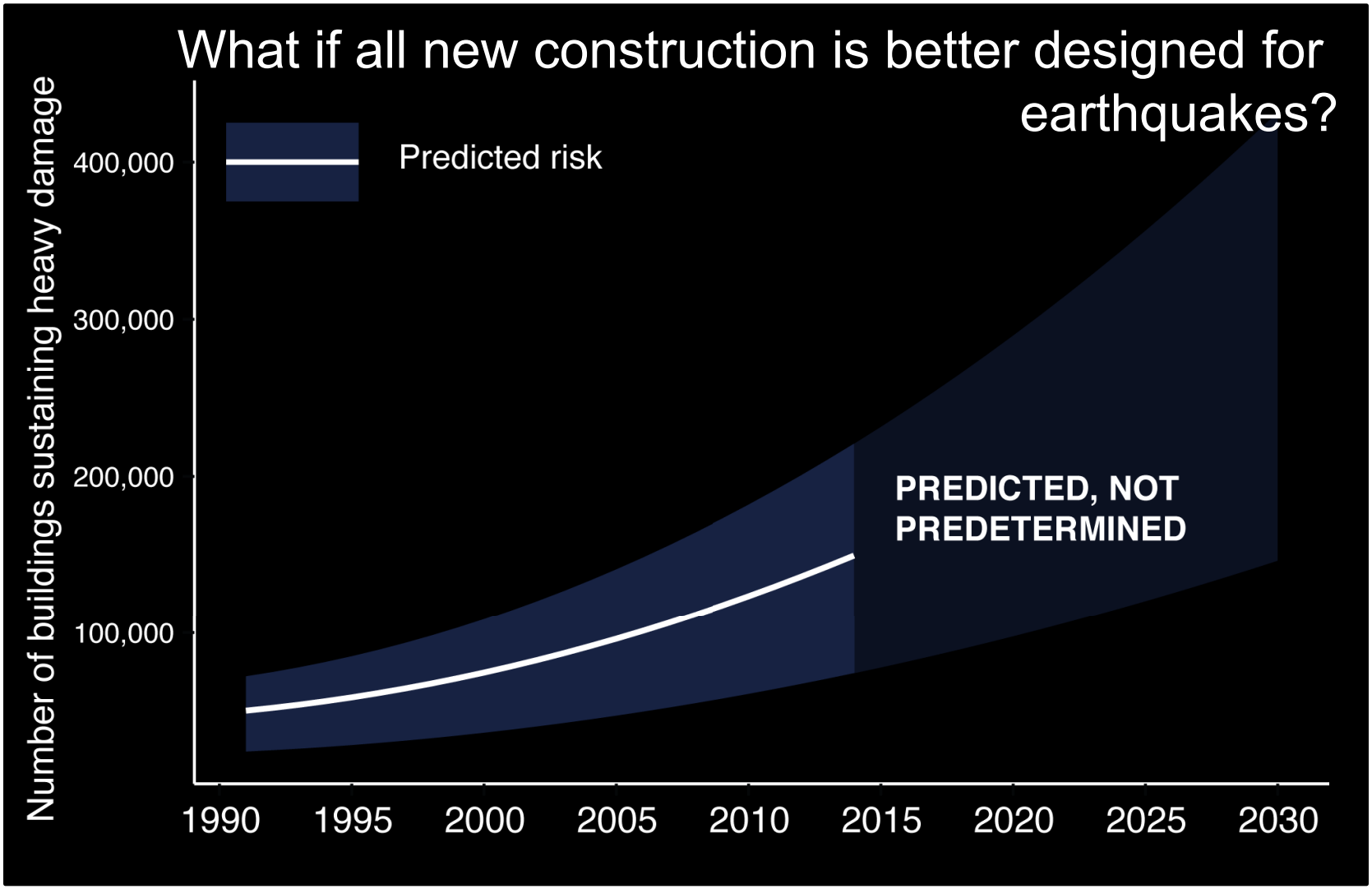
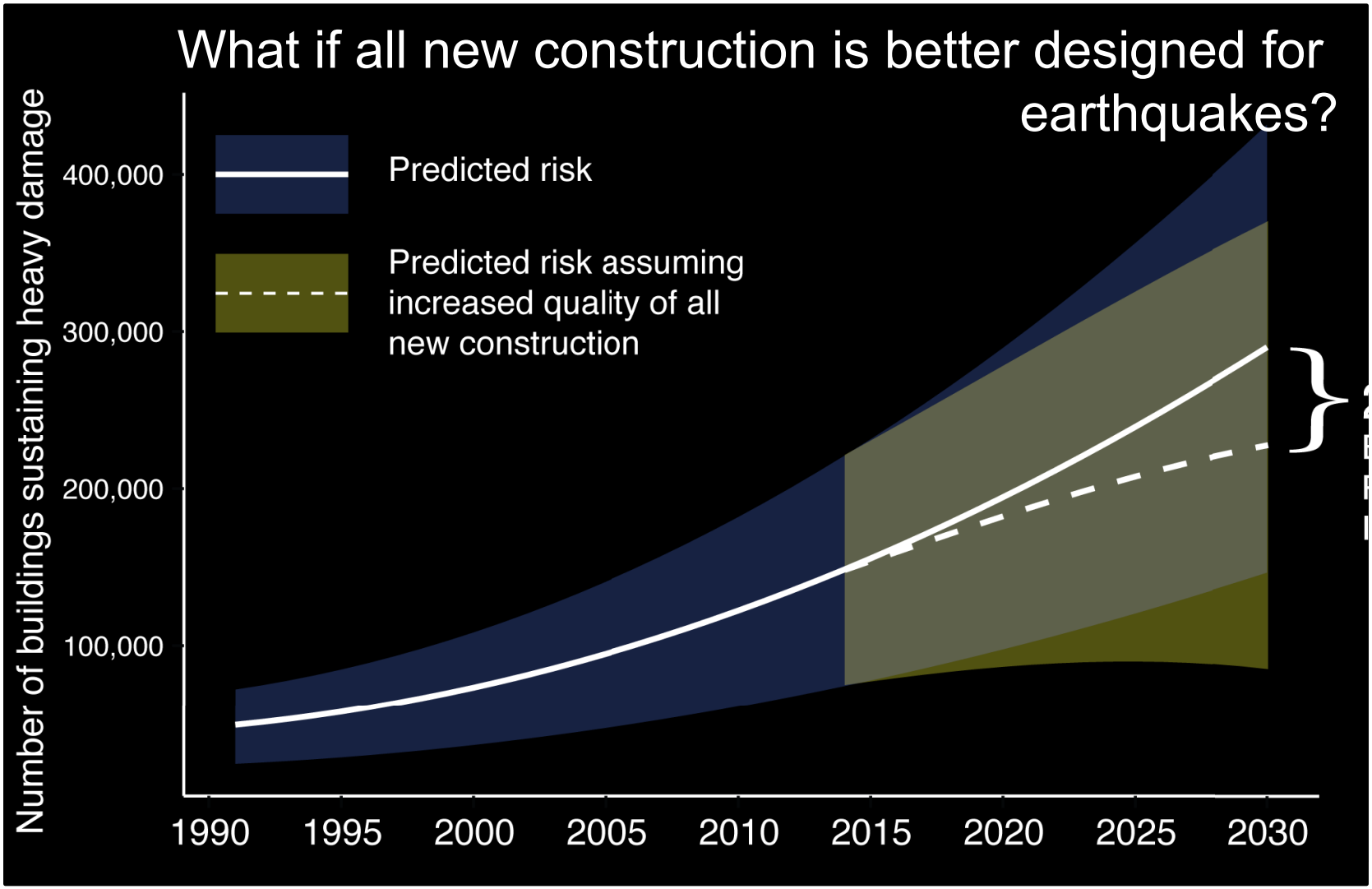


Controlling Changing Riskscapes in Kathmandu



How can we ensure that Disaster Risk Information is….

Thank you!

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