OpenStreetMap for Disaster Response & Preparedness





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Disaster Response

Mapping for humanitarian relief and public health emergencies

Who we are



an international team dedicated to humanitarian action and community development through open mapping.



Sustainable Development

Mapping to close data gaps, make invisible communities visible, help policy makers to make decisions informed by data



Development and management of tools for mapping process: mapping, analytics, imagery



HOT

OpenStreetMap

is a collaborative project to create a free editable map of the world



Leverage crowdsourcing & technology

167,000+ volunteers creating open geospatial data

+ trained validators

to provide data & improve coordination for disaster response

used by organizations such as Doctors Without Borders, & Red Cross Societies

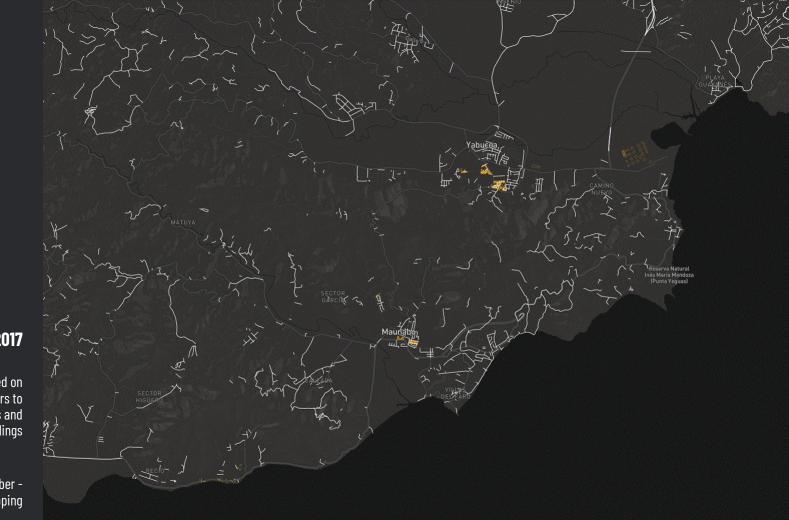




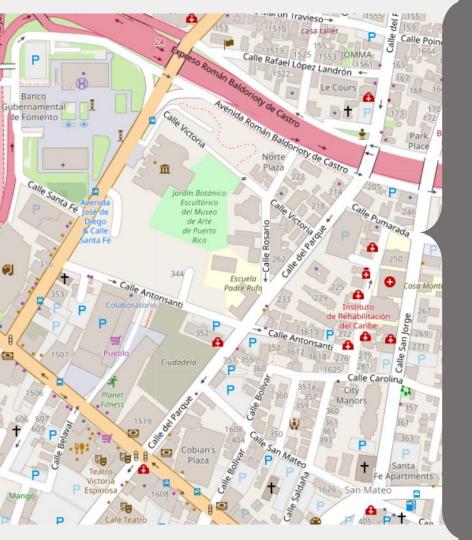
Puerto Rico 2017

activation called on remote volunteers to map roads and _____ buildings

Right: September -November mapping



© Mapbox © OpenStreetMap Improve this map



Hurricane Maria Activation

5,400+ volunteers ~300 people per day

45,000 km roads 1.5 million buildings

Making Decisions

Red Cross

> Rapid Damage Assessments

> Planning Distribution Centers and Navigation

FEMA

> Road data for road damage assessment

> Building footprints for individual assistance

Digital Humanitarian Network

> Data for response visualizations





Before the next storm

- > Aerial imagery capture / drone mapping
- > Set up Community Mapping teams
- > Surveying and mapping of critical infrastructure





Aerial Imagery

Drone technology is increasingly low-cost, and accessible

Create capacity for damage assessments and up to date maps





Community Mapping

Leverage universities, youth groups, community-based organizations

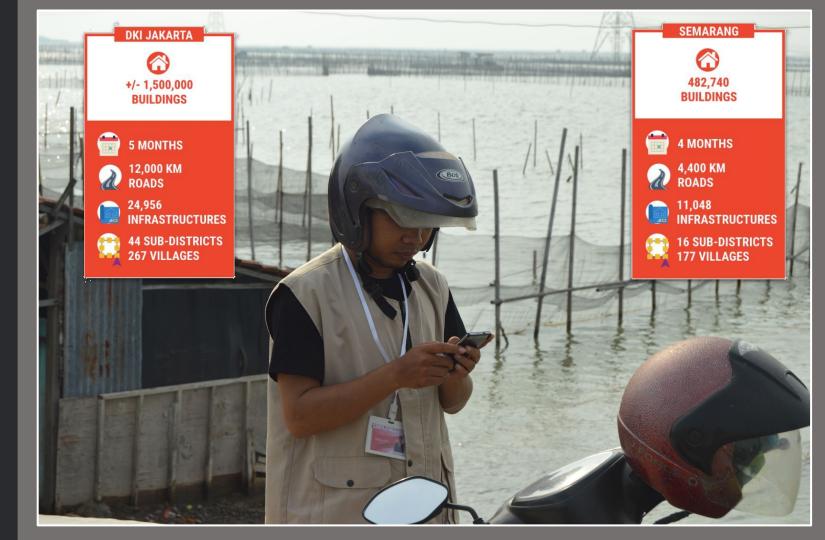




Surveying Critical Infrastructure

Case Study:

Lifeline Infrastructure Mapping in Indonesia





Evacuation Routes and Shelters Bukit Duri Village, Tebet Subdistrict 200 m 8W 01 RW 02 PKK Build RW 03 Manggarai Selatan RW 04 QGIS 2.8.1-Wien - jakarta ... E B G G & O & P P J P C G G & A & B, 5 C B E E, 7 G & I P, 1 V R / 💼 - × D 🗈 🗯 🖷 🖷 🖷 🖷 🖷 📑 11. RW 10 RW 11 00 00 InaSAFE 3.1.0c0 Show question form 2 Dry (<= 0 m) RW 09 Village Office Building ty 2 Wet (0 m - 1.0 of Dry of Wet 2 Po Buildings Buildings Clinicidore 137 369 Bidara Cina 414 320 51 industrie 28 53 776 Place of worship - lelaw 22,663 592 Sports facility 27 27 38 University/college Australian () GFDRR Aid WORLD BANK GROUP BNPB InaSAFE Supporters Run About Print . -1 legend entries removed. & Coordinate: 106.8811,-6.2048 Scale 1:43 973 E Rotation: 0,0 C Render O EPSG:4326 (OTF) •

Data for decision making

 > Evacuation Plans
> Risk modeling
> Vulnerability assessments hotosm.org Learn how to map! Open-Data and Open-Source Workshop 31 May @ 9 am – SB First Citizens Room

