How to remotely map a city's public transport network during a pandemic

July 9-11, 2021

www.trufi-association.org
What is Trufi Association?

• Non-profit start-up for informal public transport
• Started 05/2018, officially founded NGO in 04/2019
• Mission: Improve public transport worldwide through digitization
• Vision: People in development countries choose public transport options because they are accurate, helpful and attractive
What is informal transport?

• Informal
  • No official stops
  • No schedule
  • No documentation of bus lines
  • No official transport network, but private agencies

• Semi-Formal
  • Mixture of formal and informal transit, like Metro in Addis Ababa plus minibuses or Gondolas in La Paz plus minibuses

• Typical in Middle and South America, Africa and Asia
Expansion

- Pilots launched
- Trufi App launched
- In discussion
Our MaaS Products & Services

Products
• Trufi App
• Driver App
• Dashboard for Cities and Agencies
• Tools for transit data

Services
• Customization of Trufi app for cities, regions, countries
• Training of local teams
• Collection of bus network and creation of GTFS
• Maintenance of bus routes
Main Product: Trufi App

Open Source Multi-Modal Journey Planner for Semi-Formal Public Transport in Big Cities

- Trip planner with full door to door navigation
- GPS location on granular maps for easy navigation
- Multiple suggested routes, integration of transport modes
- Search suggestions for street names, crossings and points of interest
- Save preferred routes and frequent searches
- Location-specific in-service advertising

Built on Flutter with OpenStreetMap and MapTiler
Available for Android 4.1 or higher and on iOS 8.0+
Routes from OSM and multiple transport providers
Multilingual, including local languages and indigenous languages, e.g. Quechua
Released as Open Source under an AGPL license
Continuous development along the Digital Principles

Principles for Digital Development
Our project in Nouakchott

Project Objective

• Support local government with public transport consultancy

• Necessary steps:
  • Collect bus routes
  • Digitize / map to OSM
  • Create GTFS
  • Take Mapillary photos

Photo: Mouhamed Lemine
Our typical approach...

...was not possible due to pandemic.
So we decided to remote map…

GTFS and Mapillary expertise [Leo]

Transport mapping expertise [Luz]

Regional PM [Jérémy]

International PM [Zarah] & Background support [Sören]

Data collectors [Vetah & team]
Doing the data collection:
Uploading to OSM:
Creating the GTFS

GTFS Analyser
Taking Mapillary photos

Vetah
Organizing the project
Our partners in Nouakchott

Daba 'GO
Mieux connaître pour mieux se déplacer
Get in contact with us

Trufi Association & Team:
info@trufi-association.org

Project Team:
Zarah: Zarah.Ziadi@trufi-association.org
Jérémie: Jeremie.Perales@dabago.net
Leo: Leonardo.Gutierrez@trufi-association.org
Luz: Luz.Choque@trufi-association.org

Local Team:
Vetah: OSM User @vetah MOHAMED EL MOCTAR
Summary

- Local collection & remote mapping was working much better than expected
  - (+) No necessity to fly there (saving CO2 and time)
  - (-) Community is build better when you see each other

- Remote mapping possible if local team has basic technical knowledge - and much more fun if they have OSM skills
- We are ready to remote-map the next city :-)

TRUFI
Welcome aboard!

Christoph Hanser, President
christoph.hanser@trufi-association.org

with the help of: Luz Choque, Leonardo Gutíerrez, Jérémie Perales, Vetah Mohamed el Moctar

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