

INCLUSIVE PROCESS

- ▶ This new concept and platform are the result of a cocreation involving stakeholders and data scientist.
- ▶ Stakeholders included health services users, providers, government officials, communities, and academia.
- ▶ The concept and platform seek the social appropriation of knowledge.
- ▶ Data is displayed in maps and descriptive statistics for non-specialized stakeholders to interpret and communicate.
- ▶ The approach was tested in a collaborative research project.



DYNAMIC ASSESSMENT

- ▶ The platform delivers dynamic spatial-temporal measurements of accessibility, indicating travel-times to the service and the shortest journey for the traffic congestion levels.
- ▶ Shows the populations and sectors within a travel time threshold.
- ▶ Predicts accessibility changes for adding services in one or two optimal sectors.



REALISTIC PROJECTIONS

- ▶ The platform identifies locations for new services to optimize accessibility.
- ▶ The concept was tested in Cali, Colombia (2.25m) using three life-saving health services: haemodialysis, radiotherapy, and tertiary-care emergencies.



ACCURATE MEASURES

- ▶ The platform samples millions of travel time measurements between residential zones and those of health services.
- ▶ Uses anonymized and georeferenced population and housing data from the census with granularity that allows for accurate assessments.



PRACTICAL APPROACH

- ▶ The platform leverages readily available open data (census, service location) and big data (travel times).
- ▶ Can be updated as conditions change (e.g., demographics, infrastructure, traffic).
- ▶ Supports continuous planning and monitoring of accessibility.
- ▶ It can be used to inform accessibility analyses, prioritization, follow-up, and impact assessments.



EQUITY PERSPECTIVE

- ▶ The concept addresses evidence gaps and reveals inequities hidden in plain sight.
- ▶ Data and analyses are disaggregated by sociodemographic characteristics, providing an equity perspective. For example, showing differences by age, place of residence, sexual identification, ethnicity, highest level of education attained, marital status, or economic stratum of the housing unit.
- ▶ Reveals the extent by which traffic congestion reduces accessibility.



EXPANSIVE CAPACITY

- ▶ The participatory process and the platform can be adapted and tested for other services, sectors, and stakeholders.
- ▶ Potential for integration of additional data layers (e.g., insurance provider, availability of services).
- ▶ The project developed an emerging concept using a participatory approach.
- ▶ Points at specific solutions predicting their impact and offering means for accountability.





Geographical Accessibility by Car to Haemodialysis

Peak Traffic Hours

6-12 July 2020, Cali, Colombia

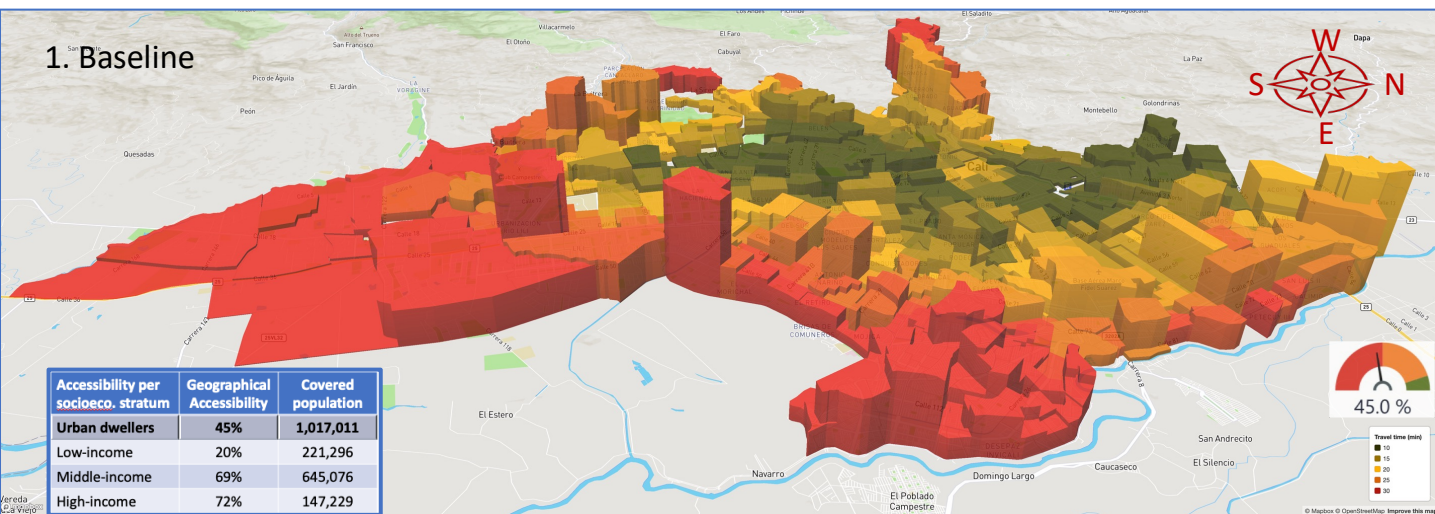
Source: doi 10.2139/ssrn.4299562

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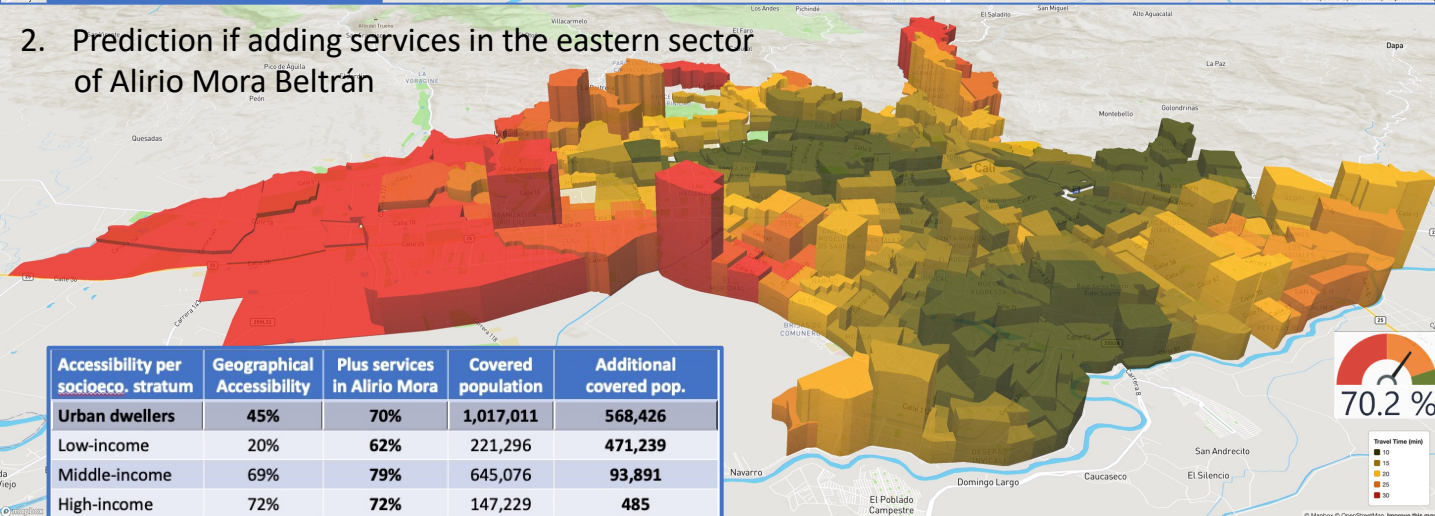
LinkedIn: @AMORE Project



1. Baseline



2. Prediction if adding services in the eastern sector of Alirio Mora Beltrán



3. Prediction if adding services in Alirio Mora Beltrán and Parcelaciones del Pance

