

traditional household surveys to help inform transport policy. The data system will give policy makers insights into how to leverage existing transport investments as well as plan optimal future investments in transport. Given the large transport investments in Dakar in the new express train (TER), new bus rapid transit system (BRT), and restructuring of the entire public bus network, these data will be crucial for ensuring that investments are optimized.

The project is well on track and has had several notable achievements over the past year. A one-day event titled “Using innovative data for supporting transport policy and mobility in Dakar” brought together more than 50 stakeholders from government institutions in Senegal. The event was chaired by the Secretary General for the Ministry of Infrastructure and Transport and engaged all necessary partners. The project also invested significantly in capacity building, including conducting a hands-on training with local institutions on using GIS for grid sampling for household surveys.

To date, the project team has scraped data on traffic and congestion continuously from Waze across the whole city and from Google Maps every hour. The team is also currently setting up the algorithms to conduct web scraping of real estate prices. Overall, good progress has been made in starting to build the pilot data system that is necessary to study the impact of the BRT and TER and support policy makers.

### Social Network Mapping and Analysis for Youth Living in High-Violence Urban Neighborhoods in Honduras

**KCP Window:** Fragility and Risk Management

**Region/Country:** Honduras

**Project Period:** October 2018–June 2020

**Task Team Leader:** Marcus Holmlund

**KCP III Funding:** US\$130,000

This grant is supporting the mapping and analysis of the social networks of youth



living in high-violence urban areas in Honduras. The mapping links persons ages 15–30 living in these areas along eight dimensions of personal interaction: (1) seeking employment; (2) personal, work related, and health problems; (3) safety and security; (4) coping and anger management; (5) drugs and sex; (6) borrowing and lending small sums of money; (7) recreation; and (8) friendship. The purpose of this analysis is to study individuals as embedded in a network of relations and seek explanations for social behavior in the structure of these networks to complement the individual agent point of view. This “network perspective” becomes increasingly relevant for research and policy when considering youth and decisions that are inherently social in nature, such as those relating to antisocial behavior and the labor market.

Work under this grant is part of an ongoing impact evaluation that uses a randomized controlled trial design to assess the economic and social impacts of a labor market insertion program. The program provides training in technical and soft skills; group-based cognitive behavioral therapy targeting prevalent issues in the target population, such as violence and aggression and self-control; and a temporary job through which participants can exercise and demonstrate their skills. This impact evaluation was designed and is being implemented in collaboration with the Honduran government. Social network mapping in this context has two primary objectives: (1) analyzing the behavior and social dynamics of target youth to understand the nature and structure of networks that inform decisions and behaviors that are inherently social, and (2) assessing how network structure characteristics (for example, an individual's “position” within a network) affect information diffusion, program take-up, antisocial behavior, labor market outcomes, and other program impacts. Baseline data collection has been completed and preparation for the first follow-up survey is underway.

