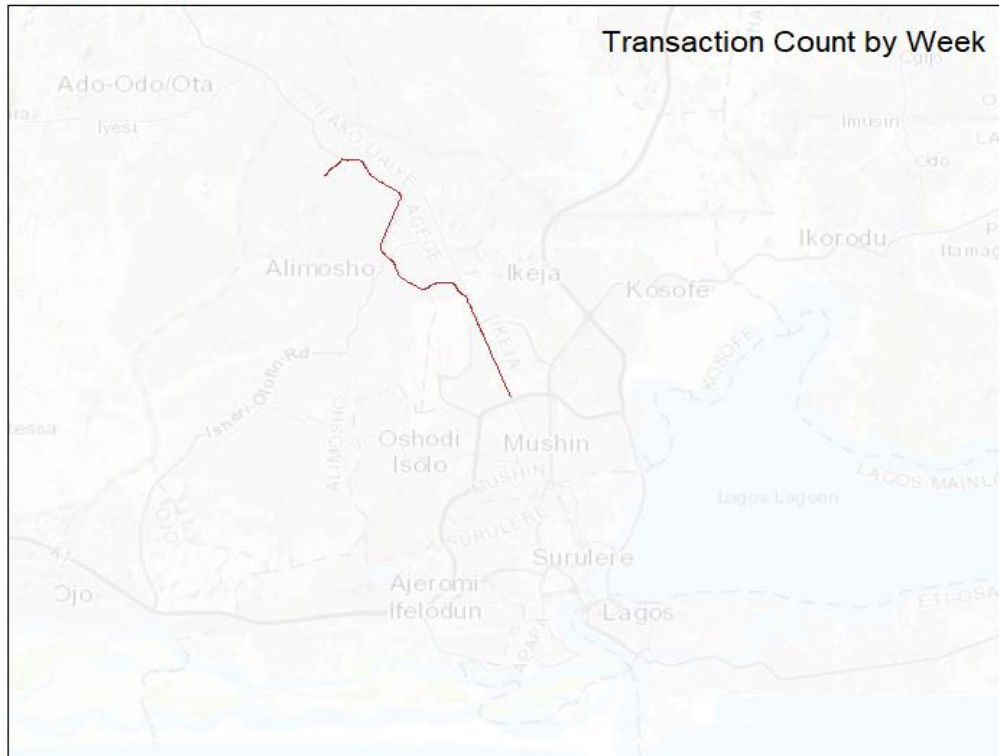


Increasing access to transit in a digital age



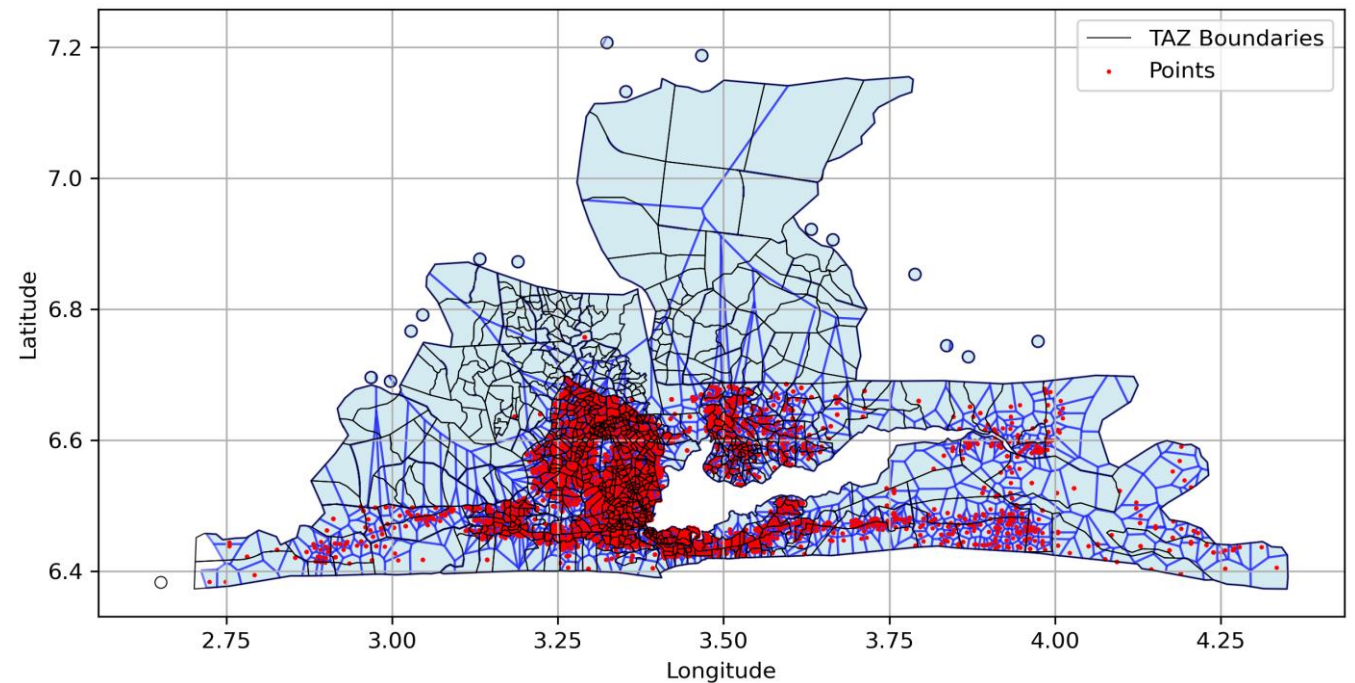
Smart cards are a treasure trove

2020-08-16



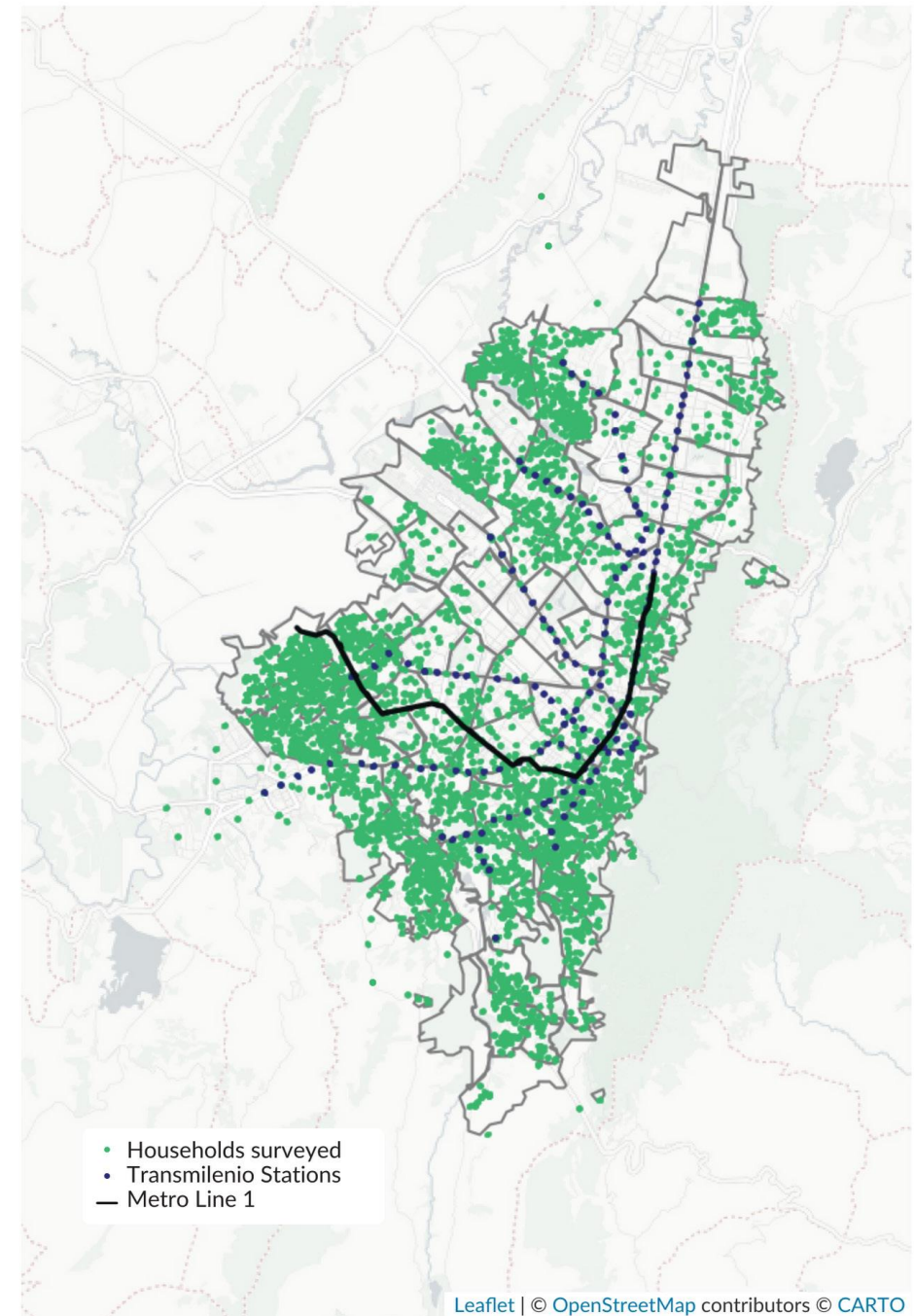
Pre-existing transport surveys and mobility data – ie, smartphone data- can be used to plan for new modes

Swipe Cards/ e-ticketing data can give access to aggregate patterns of mobility to tailor policies



Cards tell us a lot about mobility needs

- In Bogota, Women use the Integrated Public Transport System (SITP) more frequently than men (60% vs. 40% of weekly trips).
- Men have more diverse transportation options, including higher usage of motorbikes and private vehicles.
- Women make more trips for caregiving purposes, while men make more work-related trips.
- . Income levels affect men's SITP usage more than women's. Women rely more consistently on public transportation.



But might create barriers to access

Cowry Card & Wallet Setup – A Multi-Step Process

Physical Card Registration: User Accessibility & Adoption hurdles

- ☒ Requires smartphone + internet

- ✓ Must visit designated bus terminals

- ☒ ID exclusion gap: "*Know-Your-Customers*"(KYC) – a national policy - locks out some users due to non-availability of Bank Verification Number (BVN) or National Identity Number (NIN)

Wallet Activation (Postpaid)

- 1 Installation of Cowry App
- 2 KYC verification (NIN/BVN)
- 3 Activation of postpaid + link card
- 4 Min. NGN2,000 deposit
- 5 Manual wallet top-up (in-person) or risky bank linking



Subsidy mechanism

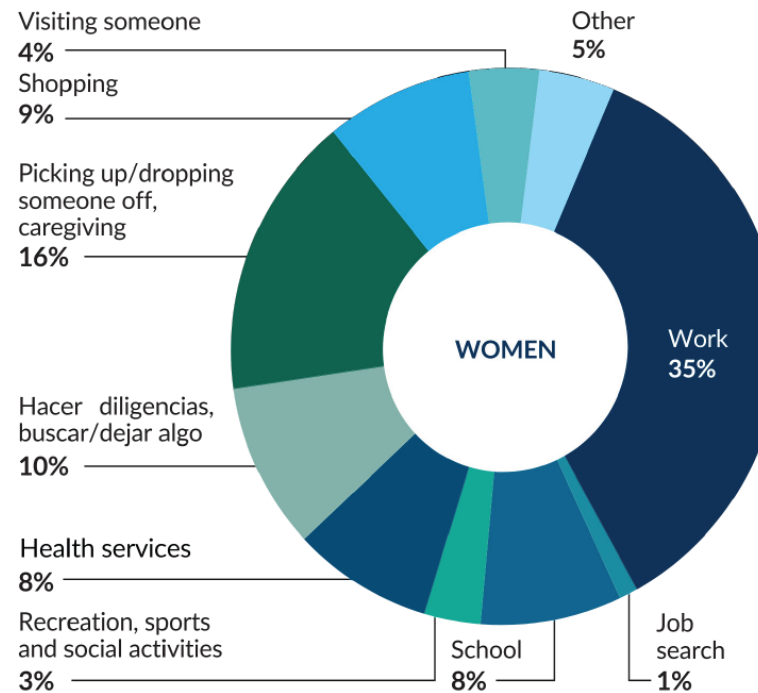
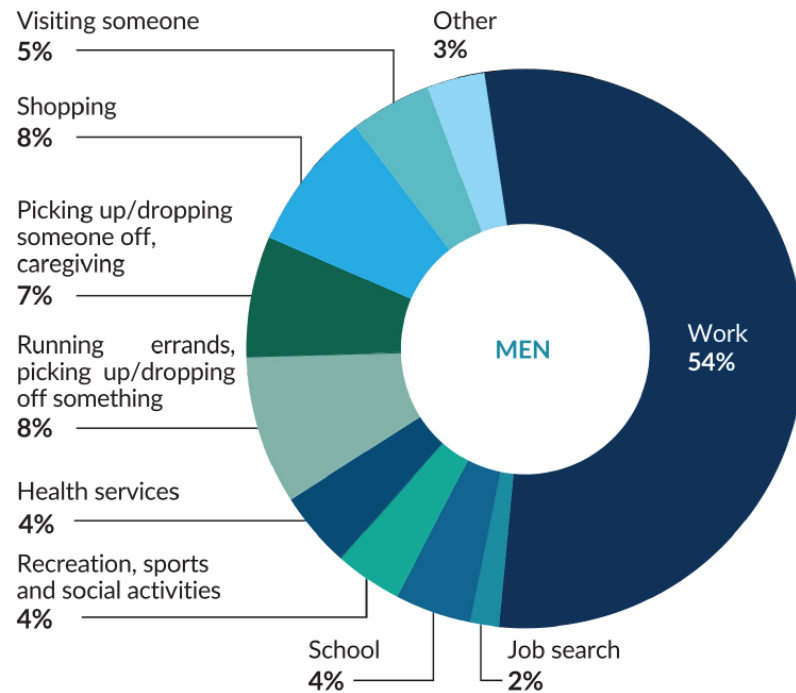
Effects of price subsidies and prepayment costs on consumer demand for BRT in Bogota, Colombia.



- Recharging adds significant time costs, about 26% of an average trip duration
- Higher prices led to fewer trips but more frequent card recharging
- Lowering recharge costs can be an effective substitute for price subsidies in improving consumer welfare

=>Reducing recharge costs could be an effective way to boost consumer welfare alongside standard price subsidies

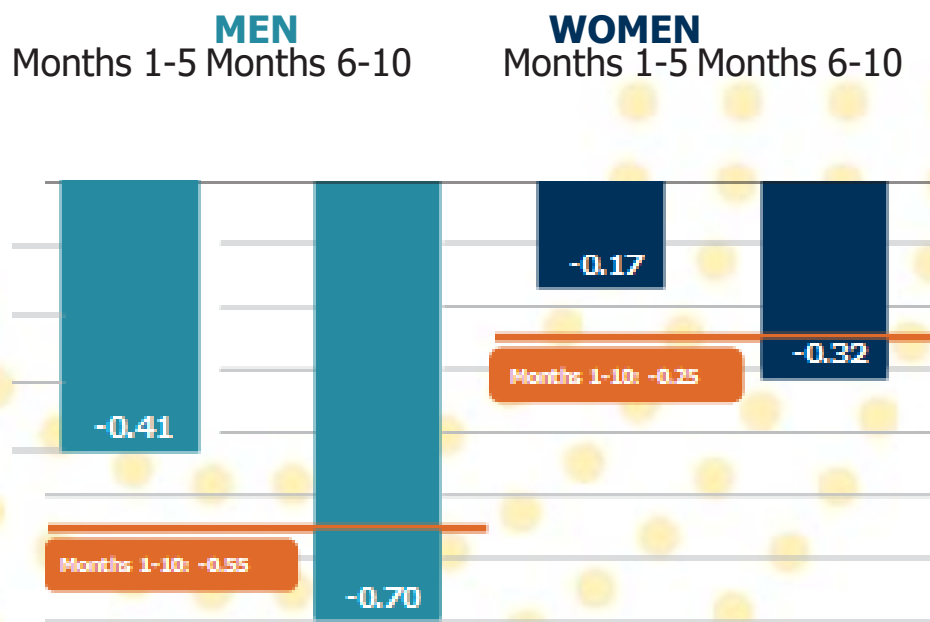
Incentivizing public transit use: evidence from Colombia



In Bogota, 35 % of women's trips in the public transit system and 54% of mens' trips are to go to work

Women use the Integrated Public Transport System more frequently than men (60% vs. 40% of weekly trips).

What happens when subsidies change ?



Women are less able to switch to other modes, thus the responses to change in prices is lower

Income levels affect men's usage more than women's. Women rely more consistently on public transportation.

Notes: Author calculations using TuLlave data and the baseline survey for the study on mobility and the fare policy for Sisbén beneficiaries (DIME, 2022). See the section on methods and footnote 12 for more details.



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