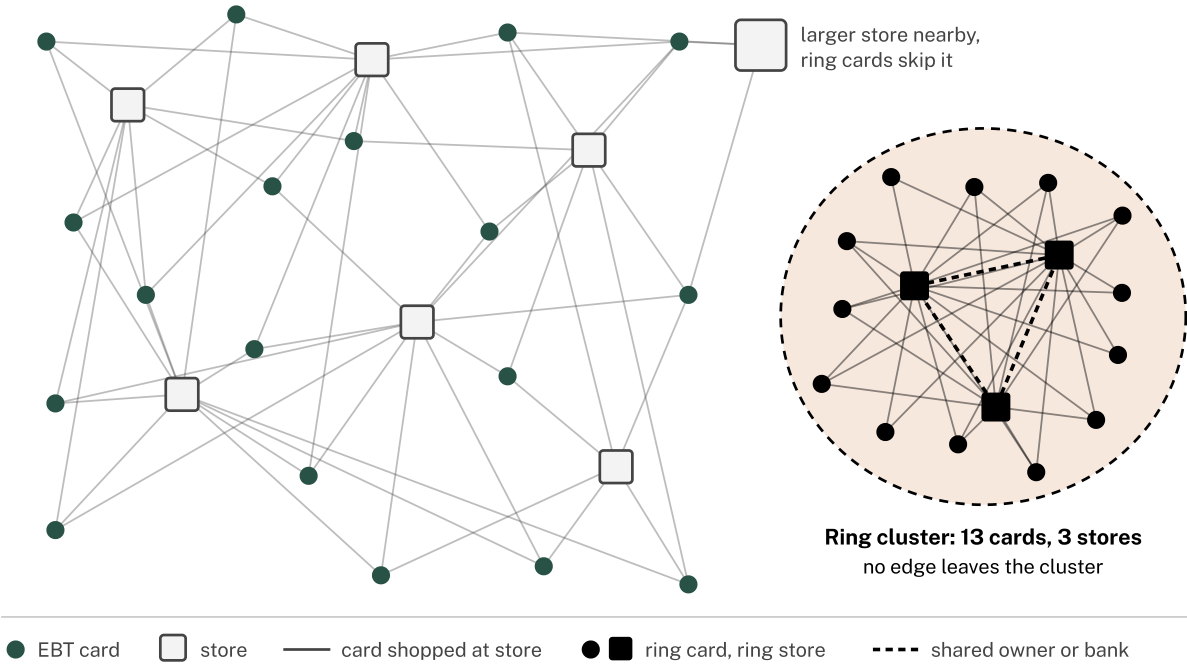


Normal shopping: each card spreads across many stores



Single-transaction rule

Sees one \$60 sale at a licensed store.
Normal amount, normal store. It passes.

Graph view

Report example: 200 cards spend nearly all
their benefits at three small stores owned
by related parties, often passing closer and
larger stores.

Signals that expose a ring

- community detection
- shared owners
- shared bank accounts

Owners come from authorization records,
bank accounts from payout records.