Replica

Change the way you see your city move.
At the center of many important transportation and land use decisions is a travel-demand model.

The development of a travel-demand model can take upwards of ten years, rendering it nearly useless by the time it has been certified.
This creates a significant opportunity to improve the places we live by equipping public and private organizations with better data and tools.
Meet Replica.

A shared, fully-calibrated platform for monitoring the movement of people and goods in a privacy-sensitive way.

FRESH  We deliver 4 models a year with data for every day of a typical week.

HOW  Understand which modes, transit lines, roads and streets people are using.

WHY  Explore why people are traveling.

WHEN  Activities are modeled second-by-second with parcel level precision.

WHO  Demographic info including income and age while protecting privacy.

VISUAL  High-fidelity visualizations of data on the map with choropleths, line maps and more.
No single source of data is a silver bullet for understanding movement.
Complete, accurate and representative turn-key solution.

**MOBILE LOCATION DATA**
We use mobile location data to create AI model of travel behavior (Personas)

**CENSUS SURVEYS**
We use census surveys to create 100% representative synthetic population of each area

**GROUND-TRUTH DATA**
We use ground-truth data including traffic counts and transit boardings to calibrate our simulation

**PERSONA MATCHING**
AI models assigned to synthetic households, preserving privacy

**SIMULATION & CALIBRATION**
Complete internally consistent micro-simulation of movement

**CUSTOMER DEPLOYMENT**
The model is accessible in Explorer, our easy-to-use querying tool
Replica is helping Kansas City allocate resources for roadway and sidewalk improvements.

Replica is helping the State of New York develop and implement a congestion pricing policy.

Replica is helping Chicago understand why transit ridership is on the decline.

Replica is helping the Bay Area understand the relationship between old and new modes of transportation.

Replica is already helping major cities solve serious problems.
QUESTIONS