

# Replica Modeling Software Overview

## What is Replica?

SACOG, in cooperation with ARB and Caltrans, recently contracted Sidewalk Labs, a division of Google, to use its [Replica software](#). Replica is a web-based “big data” tool that uses a wide array of personal travel information sourced from smartphones, in-vehicle GPS devices, and consumer marketing data to make a “replica” of a typical travel day in the Sacramento region, simulating trips made by residents.

## How Can Replica Help Transit Agencies?

Among its many potential uses, Replica will give the region’s transit operators an opportunity to gain many of the valuable ridership and trip insights that traditionally have only been obtainable through a rider survey, but without the cost and effort involved, including:

- Trips by route
- Boarding and alighting estimations by stop
- Rider demographic data (age, income, ethnicity, private auto availability)
- Estimated count of transit trips originating and ending in each census block group

## What Does Replica Need from Transit Operators?

Replica needs observed data updated on a regular, ideally quarterly, basis for calibration and reasonableness checking, including:

- Ridership data by line and day type (weekday vs. weekend), in Excel or CSV format, starting in September 2018.
- Updated GTFS files whenever there is a service change, beginning in September 2018.

## Contact Information

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