EBP◎

Synthetic population of Switzerland

Public and private enterprises need valid population data to provide tailor-made consulting services to their clients. Whether it's a matter of travel behavior, household expenses (items and quantities purchased) or the energy performance of buildings, EBP offers reliable data in all of the relevant areas.

Surveys of transportation and consumer behavior for specific regions (e.g. municipalities) or individual households have often failed in the past because the data were based on small samples, inadequately delineated spatial areas or irrelevant and unrelated parameters.

Rich and valid data from a single provider

We are able to close these gaps with a synthetic dataset for the Swiss population.
The dataset for the whole of Switzerland is drawn from:

— Around 3.6 million households, around 8.1 million persons and more than 1,000 variables
— Around 1.7 million residential buildings, including their years of construction and renovation and the type of fuel they use for heating and hot water
— Mobility information (e.g. car ownership and public transportation passes) and transport services (private motor vehicles and public transportation)
— Information about household budgets, including income and consumer behavior (spending per consumer category).

The data are generated for our individual clients according to precise geographical areas. Moreover, they can also be aggregated to account for specific population groups and
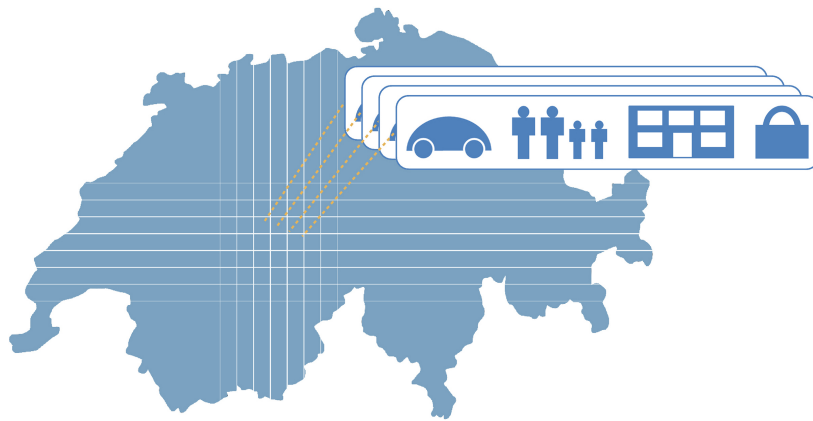
Client

Internal development project

Facts

Period	2017
Project Country	Switzerland
Synthetic population	1
Real datasets	2
Sample surveys	2
Residential buildings	1.7 Mio.
Households	3.6 Mio.
Available variables	>1,000

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Model links for various datasets

The synthetic population of Switzerland makes use of model links to combine two real datasets and two sample surveys:

— Buildings and Dwellings statistic
— Motor vehicle information system (including all passenger vehicles)
— Household income and expenditure survey (sample)
— Micro-census on transportation and mobility (sample)

Other datasets (e.g. of municipality tax bases) are deployed to ensure the most meaningful linkage of data records. The developed model links represent the actual substance of synthetic Switzerland. The register data they are based on are not the property of EBP.

Reliable data at municipality level

The "Synthetic Population of Switzerland" provides reliable data on energy consumption, transportation and consumer behavior in Switzerland at the level of Swiss municipalities. This enables, for instance, examinations of the impact of various new instruments such as energy surcharges and road pricing on individual regions or population groups.