

## 1. Basic Information

- This folder contains MATSim input data for the scenario of Santiago de Chile.
- Currently, there are 3 versions (v1, v2a and v2b); improvements in the scenario generation/calibration (potentially also from your side) will result in further versions.
- IMPORTANT NOTE: If you are using the data or the code from our github repository (see below), please cite the following publication

Kickhöfer, B., D. Hosse, K. Turner, and A. Tirachini (2016). Creating an open MATSim scenario from open data: The case of Santiago de Chile. VSP Working Paper 16-02. See <http://www.vsp.tu-berlin.de/publications>. TU Berlin, Transport Systems Planning and Transport Telematics

## 2. Further Information

- Car network data has been obtained from [www.openstreetmap.org](http://www.openstreetmap.org)
- Public Transport supply data has been obtained from GTFS (<http://datos.gob.cl/datasets/ver/1587>) and a separate network has been created and merged with the car network.
- Demand data and car counts have, among other things, been obtained from a recent O-D survey (<http://www.sectra.gob.cl/biblioteca/detalle1.asp?mfn=3253>).
  - This version contains a 10% sample of Santiago, i.e., 665,201 agents who were built with information of interviewees during working days from months between July 2012 and November 2013, excluding January and February of 2013.
  - This sample was built cloning the original interviewees a number of times proportional to the expansion factors determined by Contreras (2015)<sup>1</sup>
  - The activity locations of the clones were randomized with land use information provided by SII (See <http://www.sii.gob.cl/transparencia/>)
  - The activity end times of all the agents were randomized using smartcard information.
- The code for converting this data into MATSim input data is available in our github repository, currently in the Santiago playground<sup>2</sup>.
- If you have any questions, please get in touch with B. Kickhöfer ([benjamin.kickhoefer@gmail.com](mailto:benjamin.kickhoefer@gmail.com)) or A. Tirachini ([alejandro.tirachini@ing.uchile.cl](mailto:alejandro.tirachini@ing.uchile.cl))

## 3. Usage

- Download the file v2b.zip to your hard drive and unzip it.
- Execute `./runBaseCase10pct.sh` from the command line *from within the v2b folder* to run a simulation for 100 iterations (under Windows, you might first need to install Cygwin<sup>3</sup> to run this shell script).
  - Due to the size of this scenario, you may have to change the last line of the shell script. In particular, you will have to modify the maximum size of the memory allocation pool, argument which currently is “-Xmx8G”. Simply replace the 8G for a bigger number depending on your computer memory.
- No separate checkout of MATSim is needed for this, only Java version 1.7 or higher should be installed on the system.
- Changes to the scenario setting can be done via the config file in v2b/santiago.
- Default MATSim output can be found in v2b/santiago/output.

<sup>1</sup>Contreras, R. (2015). Encuesta Origen Destino Santiago 2012: Proceso de Expansión y Corrección en Ausencia de Datos Censales. XVII Congreso Chileno de Ingeniería de Transporte. Concepción

<sup>2</sup>See <https://github.com/matsim-org/matsim/tree/master/playgrounds/santiago/src/main/java/playground/santiago>

<sup>3</sup>See <https://cygwin.com/>