

# Mobility Pricing in Switzerland (MOBIS)

Webinar for participants



Universität  
Basel



Eidgenössische Technische Hochschule Zürich  
Swiss Federal Institute of Technology Zurich

Zürcher Hochschule  
für Angewandte Wissenschaften



# Webinar overview

## 1 MOBIS

- Design
- Results

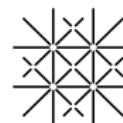
## 2 MOBIS-COVID

## 3 Outlook

# Who is the MOBIS team?



Eidgenössische Technische Hochschule Zürich  
Swiss Federal Institute of Technology Zurich



Universität  
Basel

- Prof. Kay W. Axhausen
- Joseph Molloy
- Christopher Tchervenkov
- Thomas Schatzmann

- Prof. Beat Hintermann
- Beaumont Schoeman
- Dr. Thomas Götschi
- Dr. Alberto Castro

Zürcher Hochschule  
für Angewandte Wissenschaften



- Uros Tomic

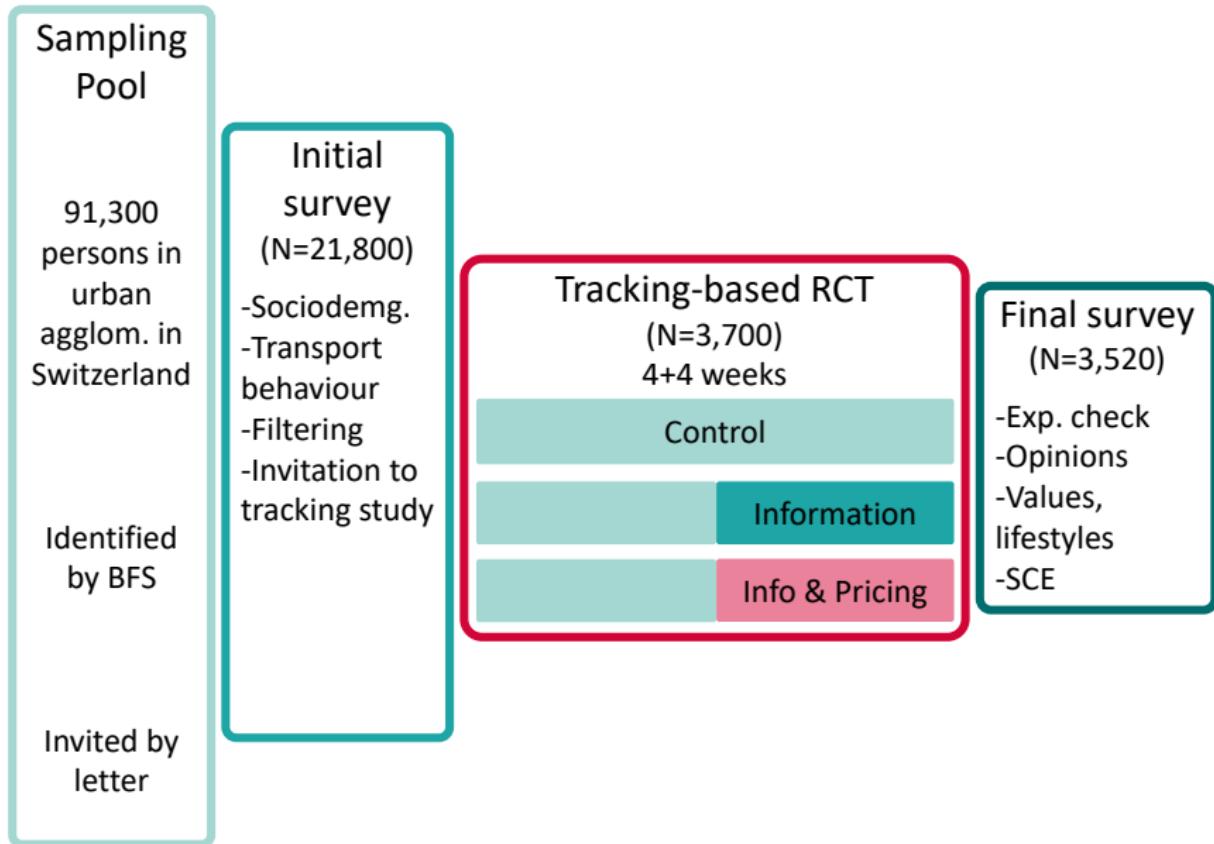
External funding sources:

- Innosuisse
- UVEK

# Goal of the study

- Observe mobility behavior for **research purposes**
- Test effect of **mobility pricing** using a randomized control trial
- Gather **additional information** using surveys
  - Sociodemographics
  - Views on transport-related topics
  - Preferences

# Study design



# External costs of travel

Definition: **Costs not borne by individual, but by society**

- Health costs
  - Air pollution, noise, accidents
  - Benefit: Physical exercise
- Climate damages
- Congestion

Computation of external costs (in CHF) based on Swiss norms and transport model for each trip

# Observation period and control group

The screenshot shows a weekly report from the MOBIS study. At the top, logos for ETH Zürich, Universität Basel, and zhaw School of Engineering are displayed. The title "Report | Week 5" and the date range "26.10.2019 - 01.11.2019" are prominently shown. The message to the participant, Mr. John Doe, expresses gratitude for his participation in the 5th week of the study. It also provides a summary of his participation: 7 active days and 0 inactive days. Below this, it states that external costs for different travel modes are displayed. A section titled "Distance by transport mode" shows the following data:

Transport Mode	Distance
Car	239 km
Train	0 km
Bus	23 km **
Bike	0 km
Walk	7 km

Icons for each mode are shown next to the distance values. A note indicates that the increase/decrease in travel distance since last week is tracked. A legend defines the symbols: a circle with an upward arrow for increase, a circle with a downward arrow for decrease, and a circle with a horizontal line for no change.

● Increase/decrease in travel distance since last week  
\*\* Includes all local public transport: Bus, Tram, Metro & S-Bahn

# Treatment

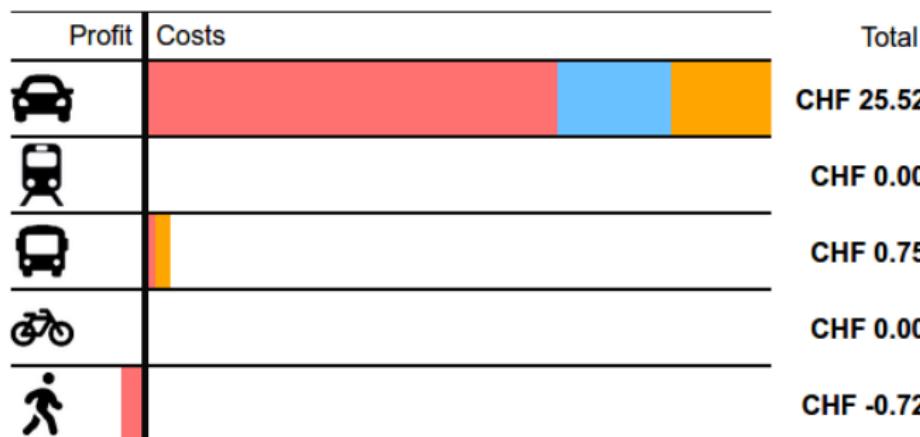
Your external costs for the last week

Health  
**CHF 16.70**

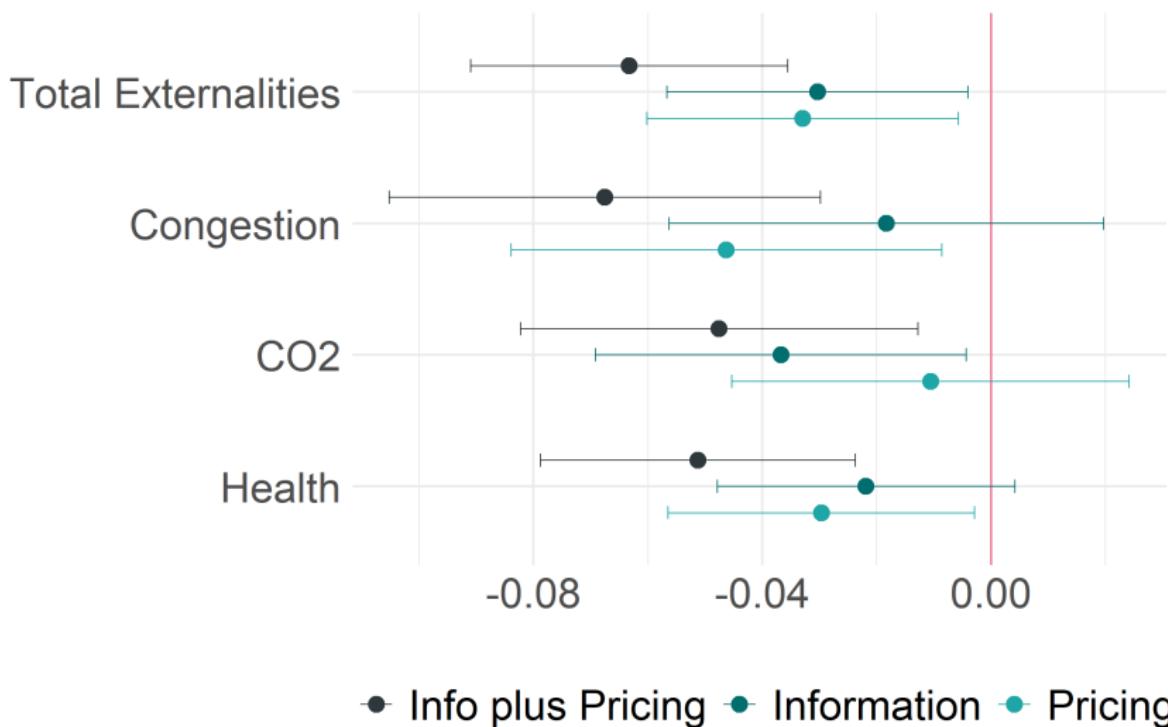
CO2  
**CHF 4.51**

Congestion\*  
**CHF 4.32**

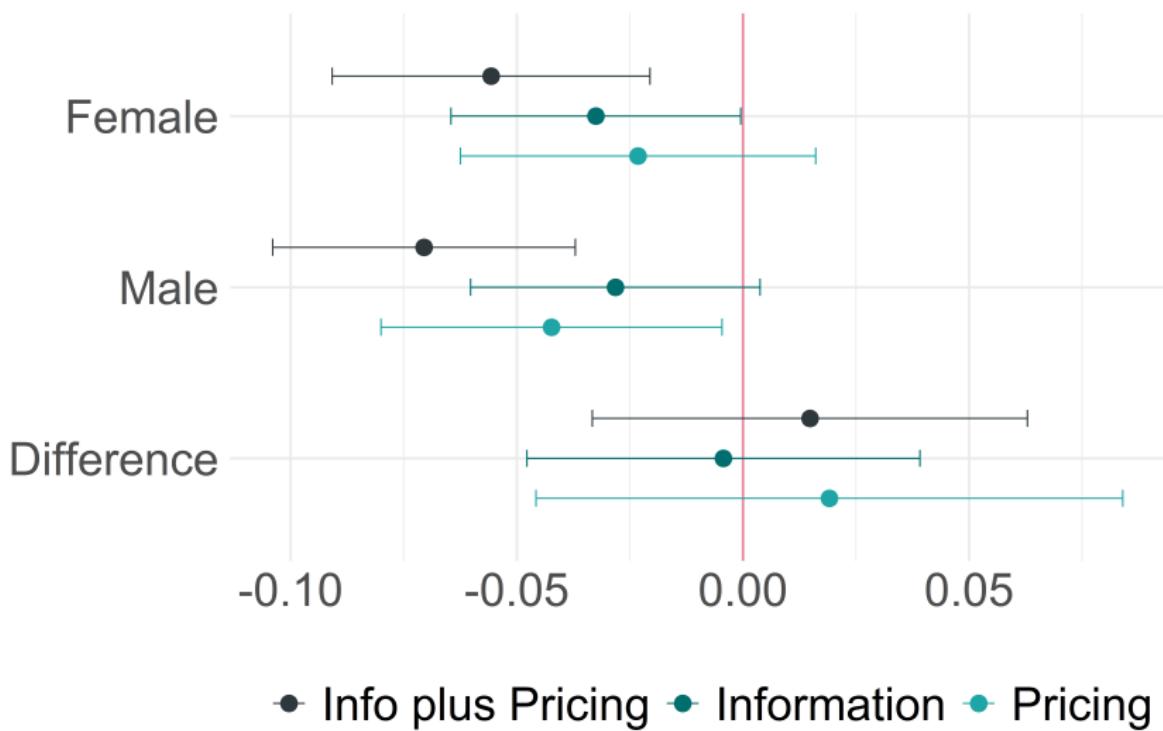
\*Includes the public transport [peak hour surcharge](#)



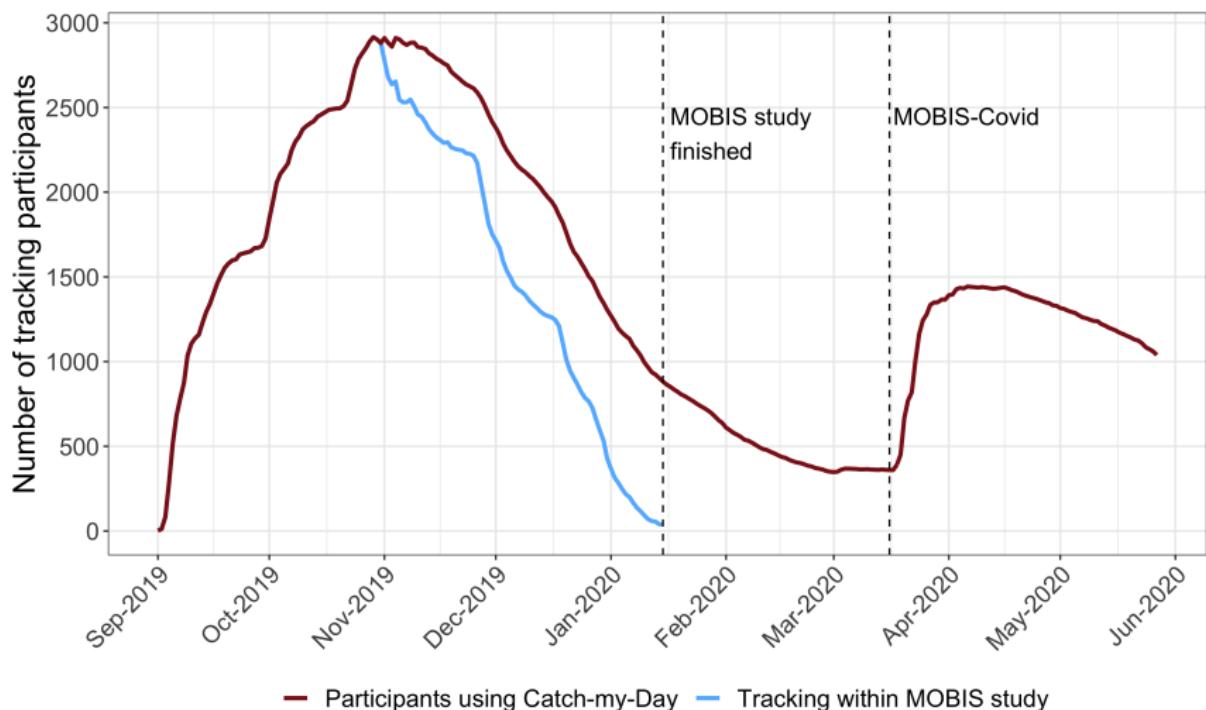
# Average treatment effect, by externality



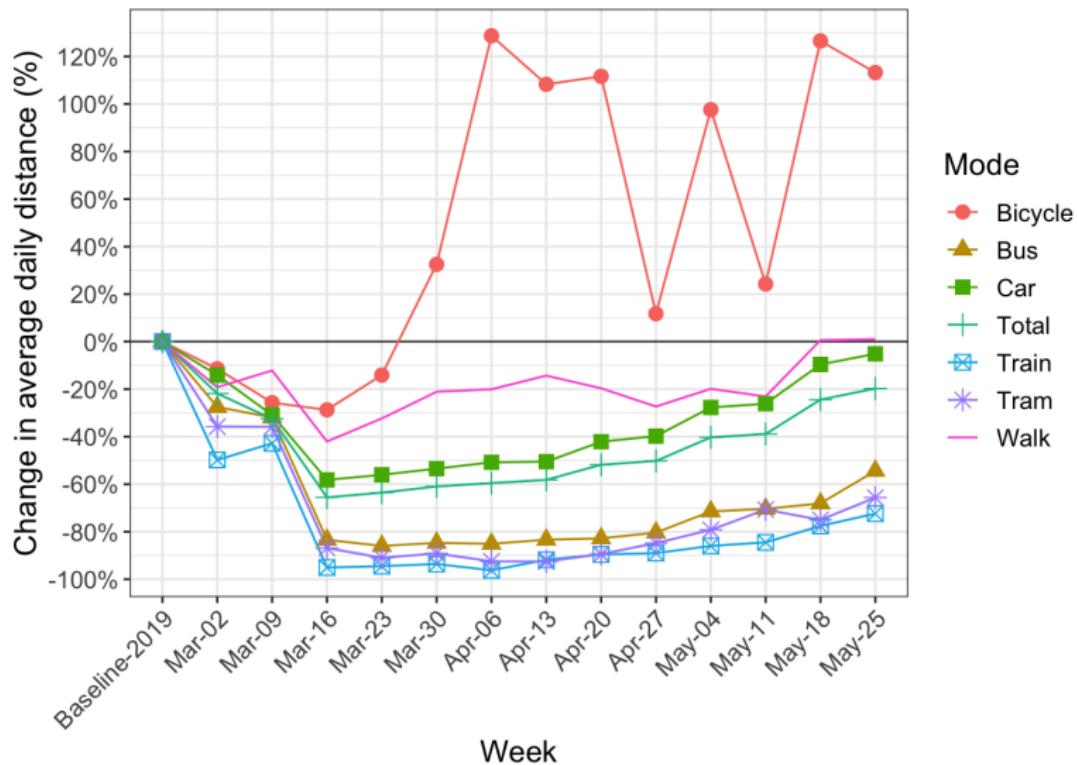
# Total externalities, by gender



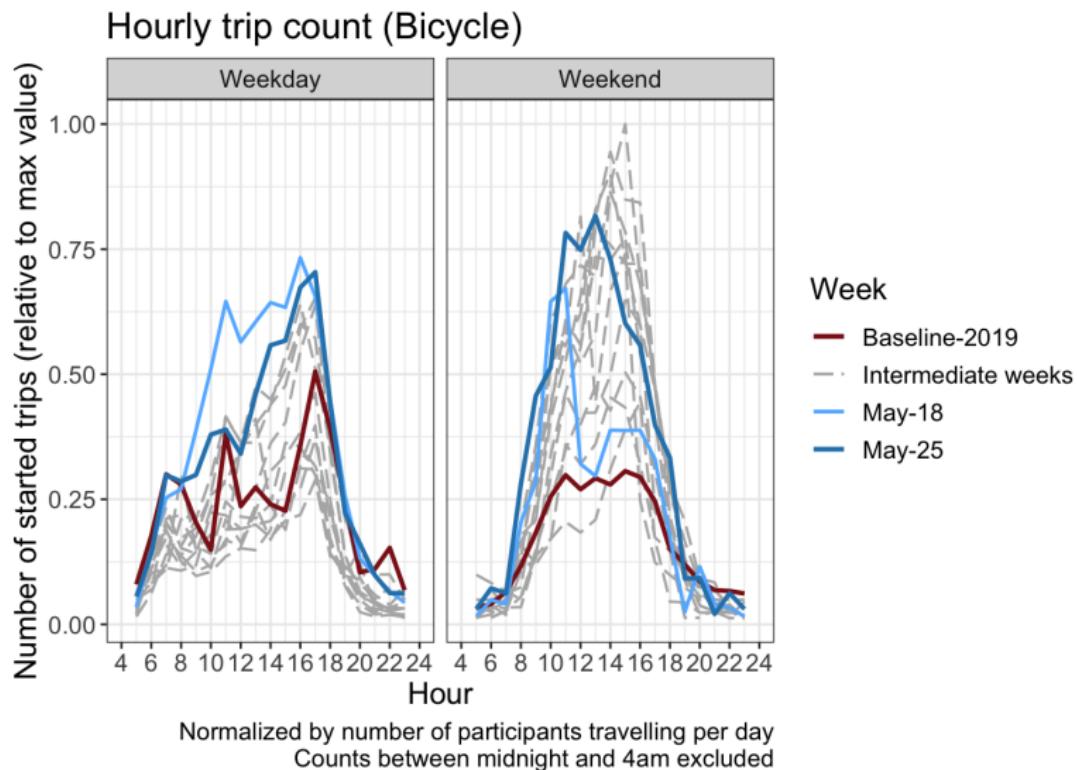
# MOBIS-COVID: Participation



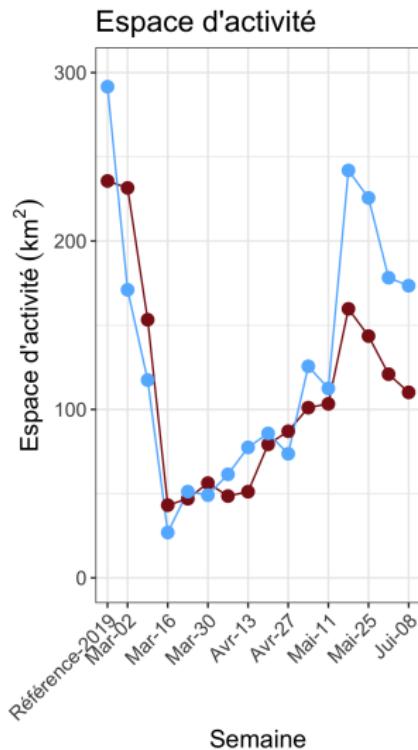
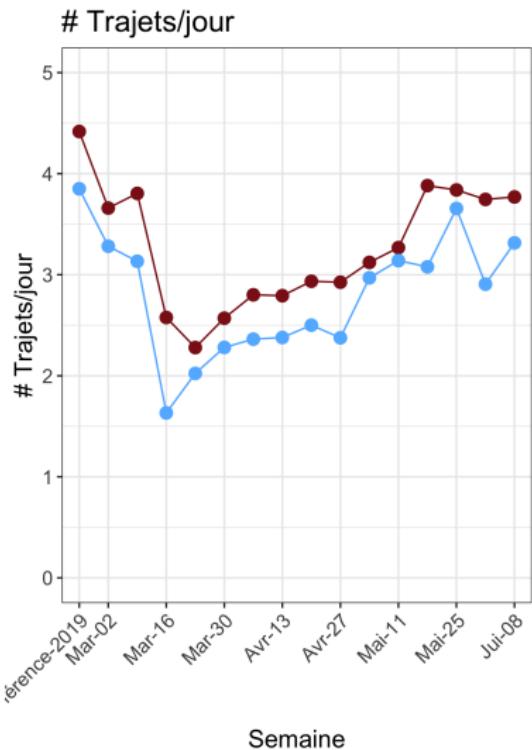
# The real challenge for the transport system



# A bicycle boom?



# Trips and space



# Adjustments?

- How will we adjust to "social distancing"?
- Will we rebuild the cities?
  - Widen the sidewalks?
  - Remove the on-street parking spaces for the bicyclists?
- What will happen to unused offices?

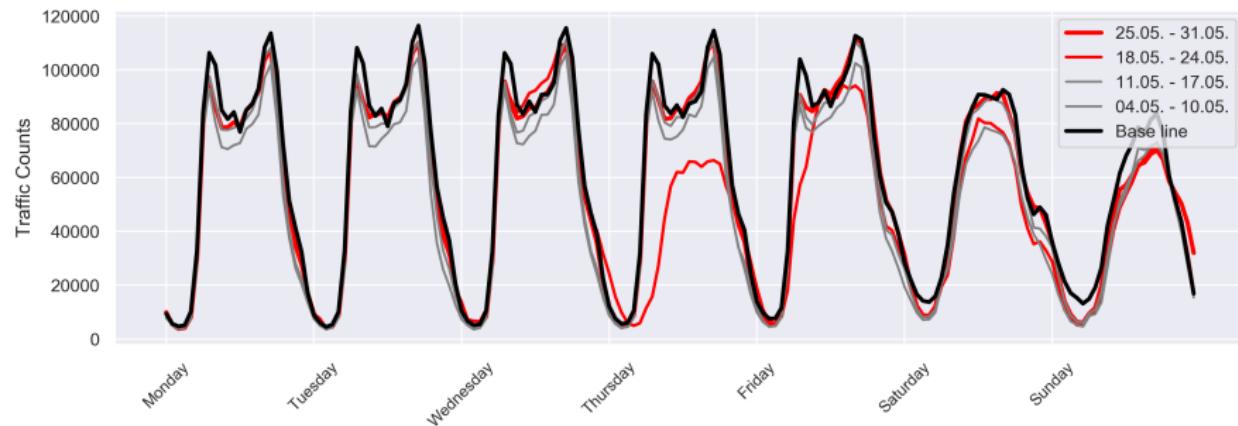
# Did we learn something?

- Have we changed our preferences?
  - Are we willing to walk longer?
  - Will we avoid public transport more?
- Will we make our (personal) world more resilient?
  - More monetary savings
  - Stronger local social networks
  - Higher physical fitness

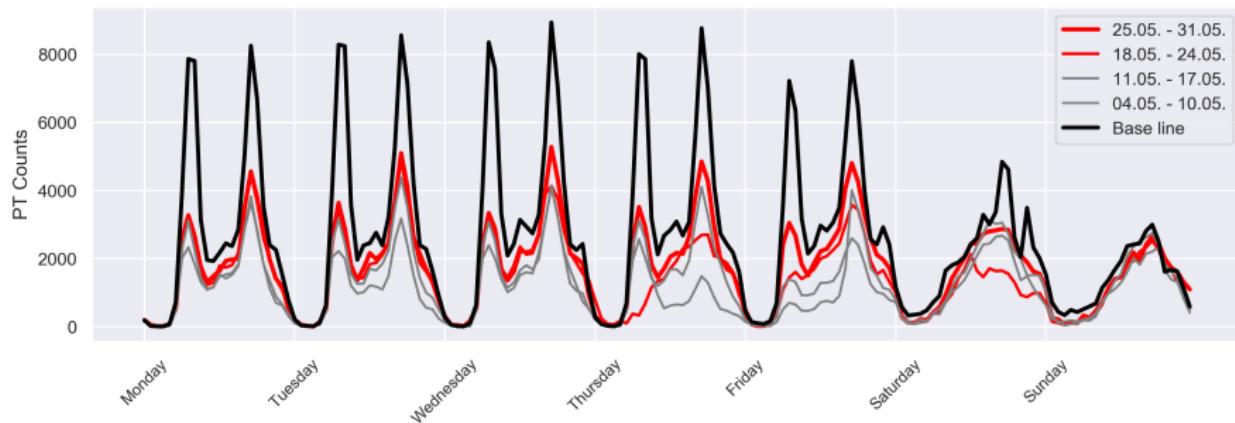
# Timeline

- Tracking (hopefully) until at least September
- Next month: Personal COVID travel report
- First quarter of 2021: MOBIS report

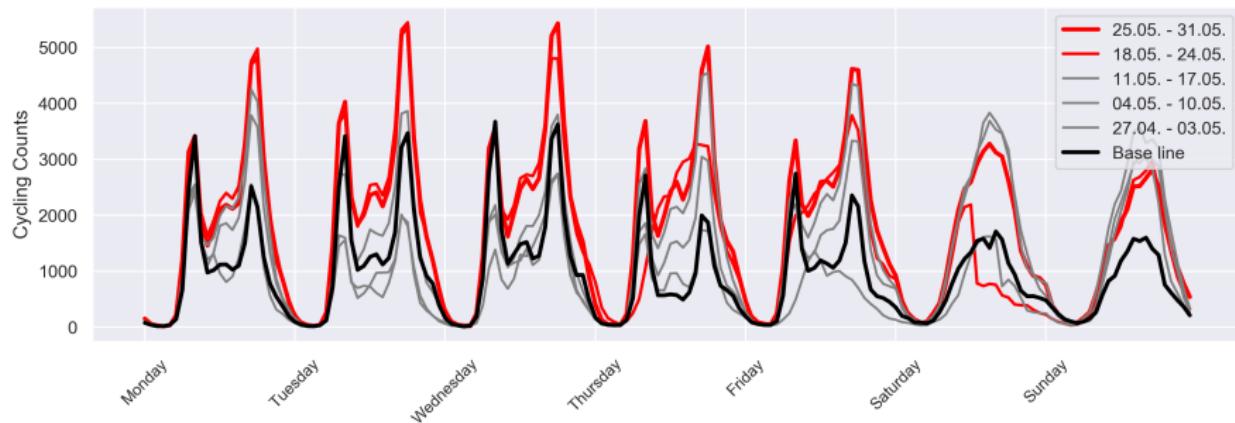
# Vehicle counts in Zürich



# Passengers counts at Hardbrücke



# Traffic counts in Zürich: Bicyclists



# Pedestrian counts in Zürich

