


Did COVID19 teach cycling?

Presentation

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Did COVID19 teach cycling?

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December 2020

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Acknowledgements

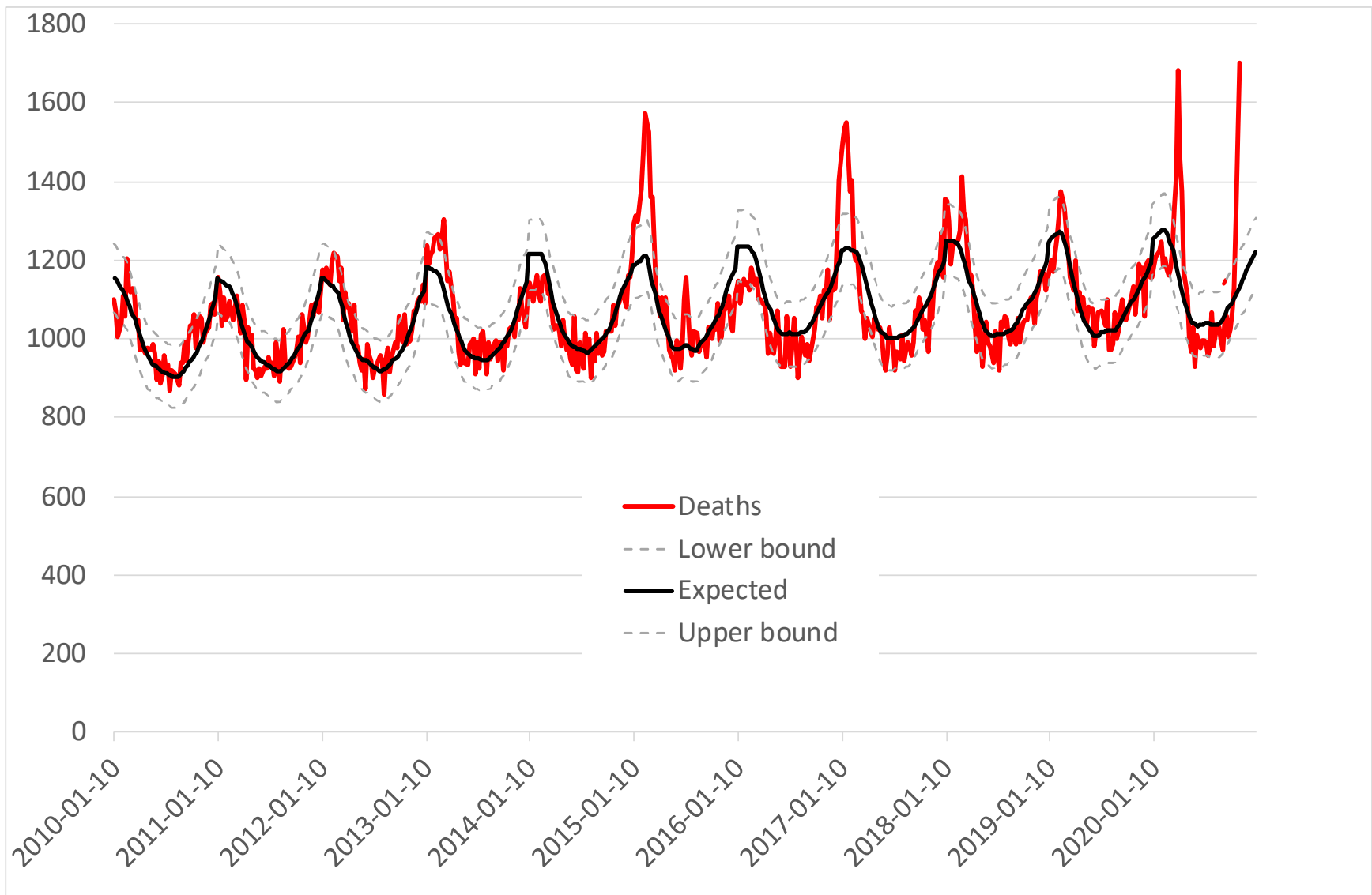
ETH Zürich

- J Molloy
- C Tchervenkov
- T Schatzmann

WWZ, Universität Basel

- B Hintermann
- B Schoeman

Excess deaths in Switzerland since 2010



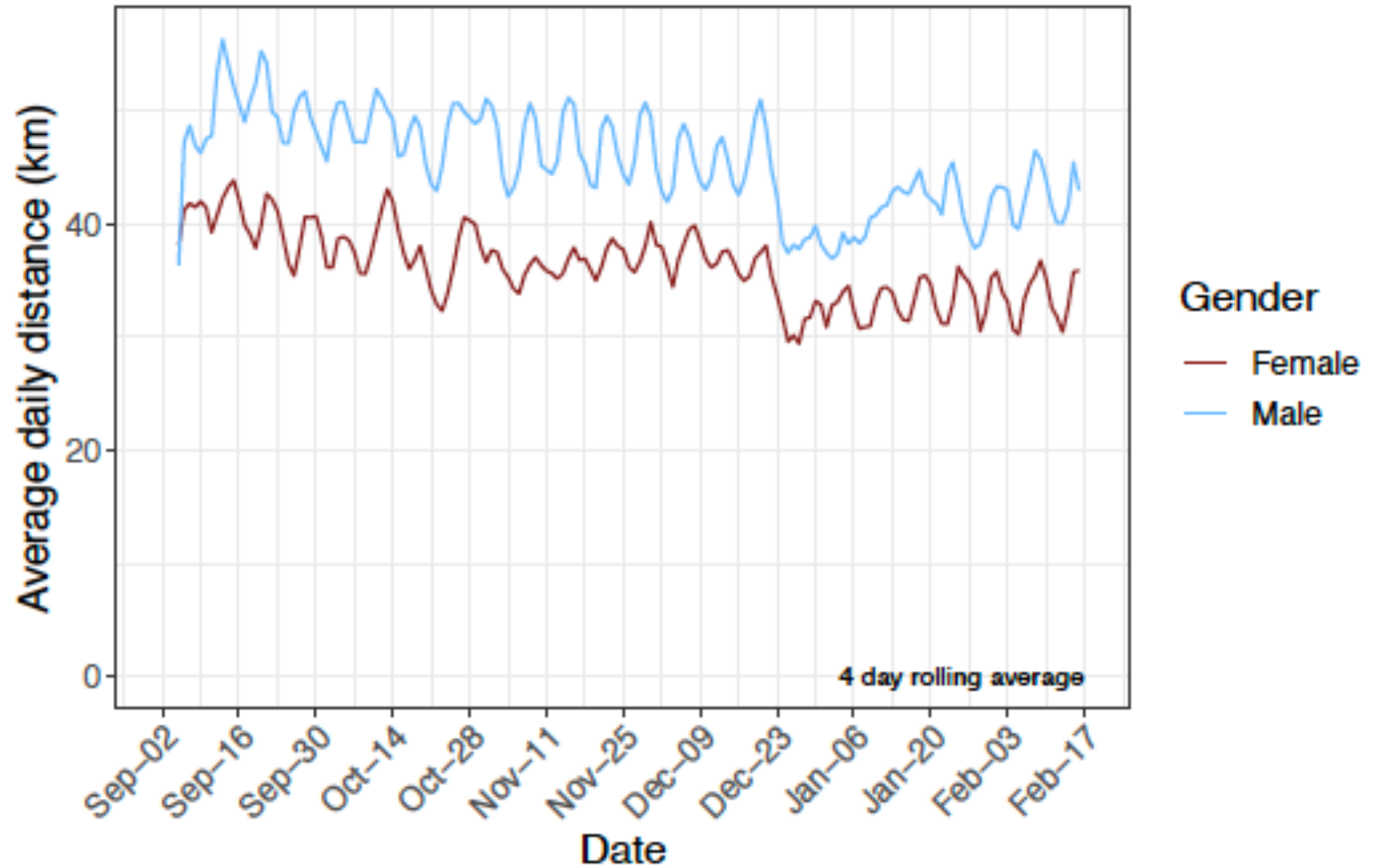
Adapted from: www.bag.admin.ch

MOBIS Sample

MOBIS sample of fall 2019

- A virtual mobility pricing study with car and transit users
- Yes, the traveller respond substantially
- Agglomerations of the German and French speaking Switzerland
- 3750 participants for 8 weeks; 100 Franks incentive
- Catch-a-day app (motion-tag, Berlin)

MOBIS PKm fall/winter 2019/2020



MOBIS COVID19 sample

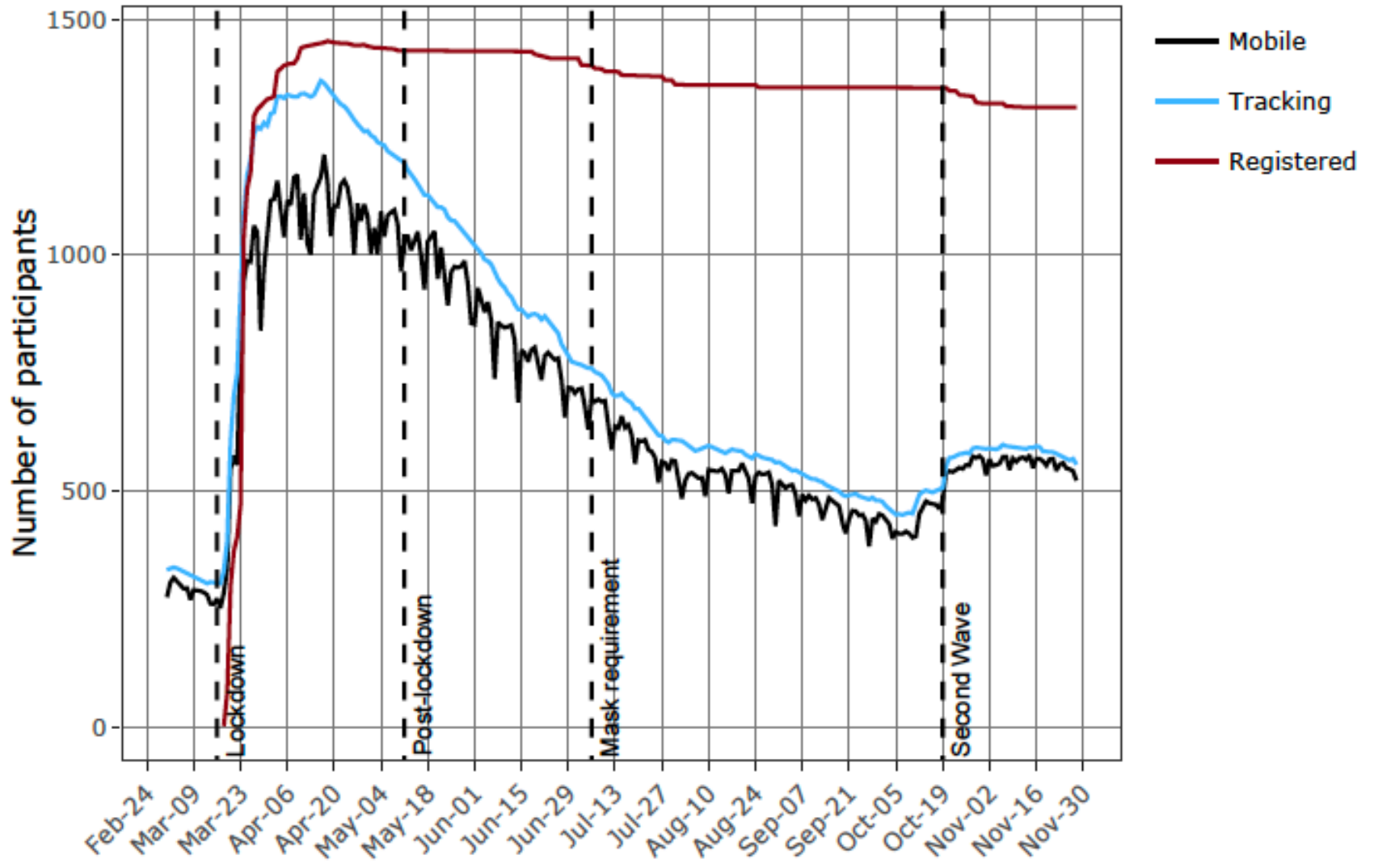
MOBIS/COVID19 sample

- 1300+ started to track again after our invitation
- No incentives; just volunteers

- 3 short surveys addressing work and work location, deliveries, and health

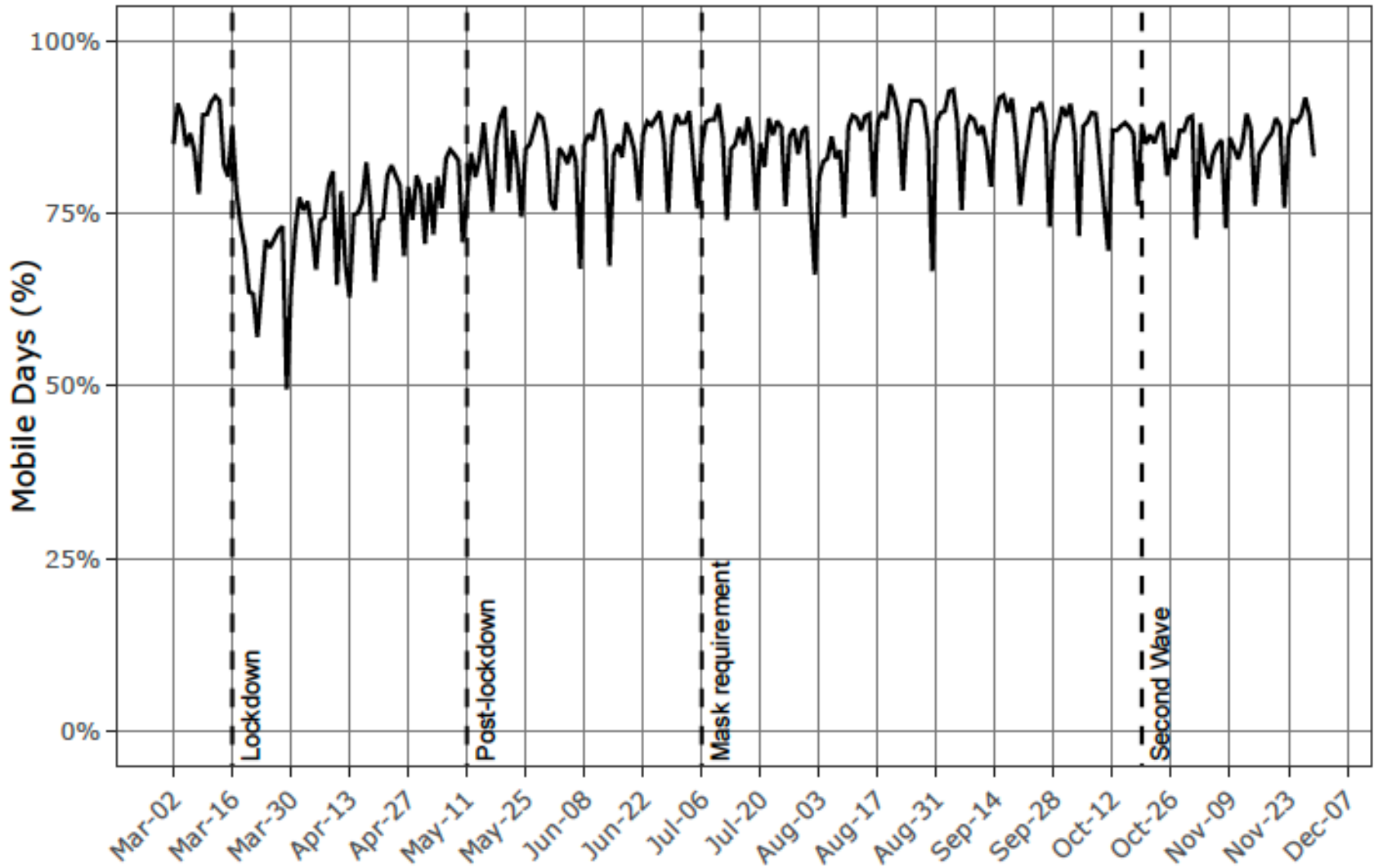
- Second invite for the second wave
- Further recruitment of new participants with LINK

MOBIS/COVID19 sample since March 2020



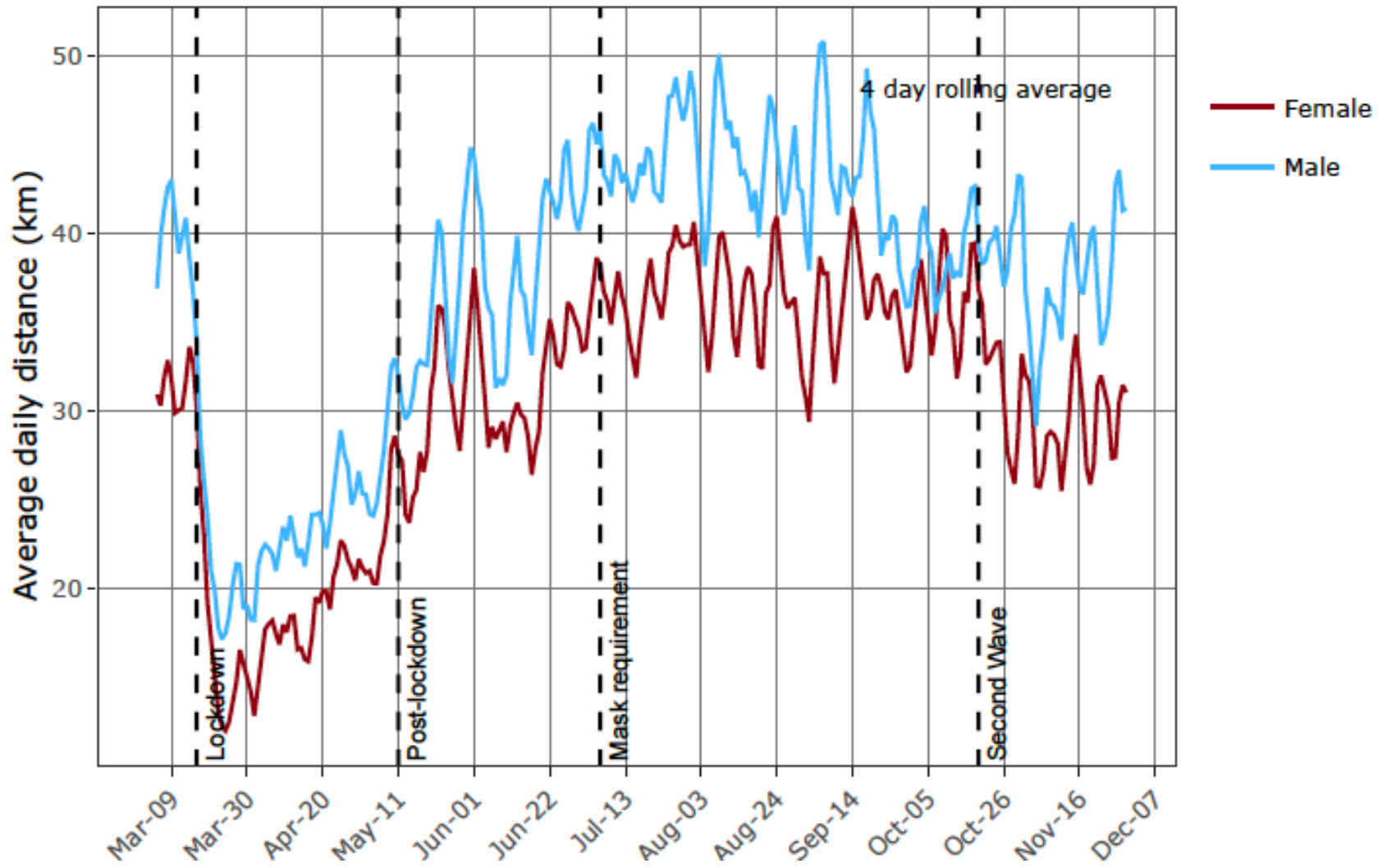
MOBIS/COVID19: Out-of-home share

Mobile person by day

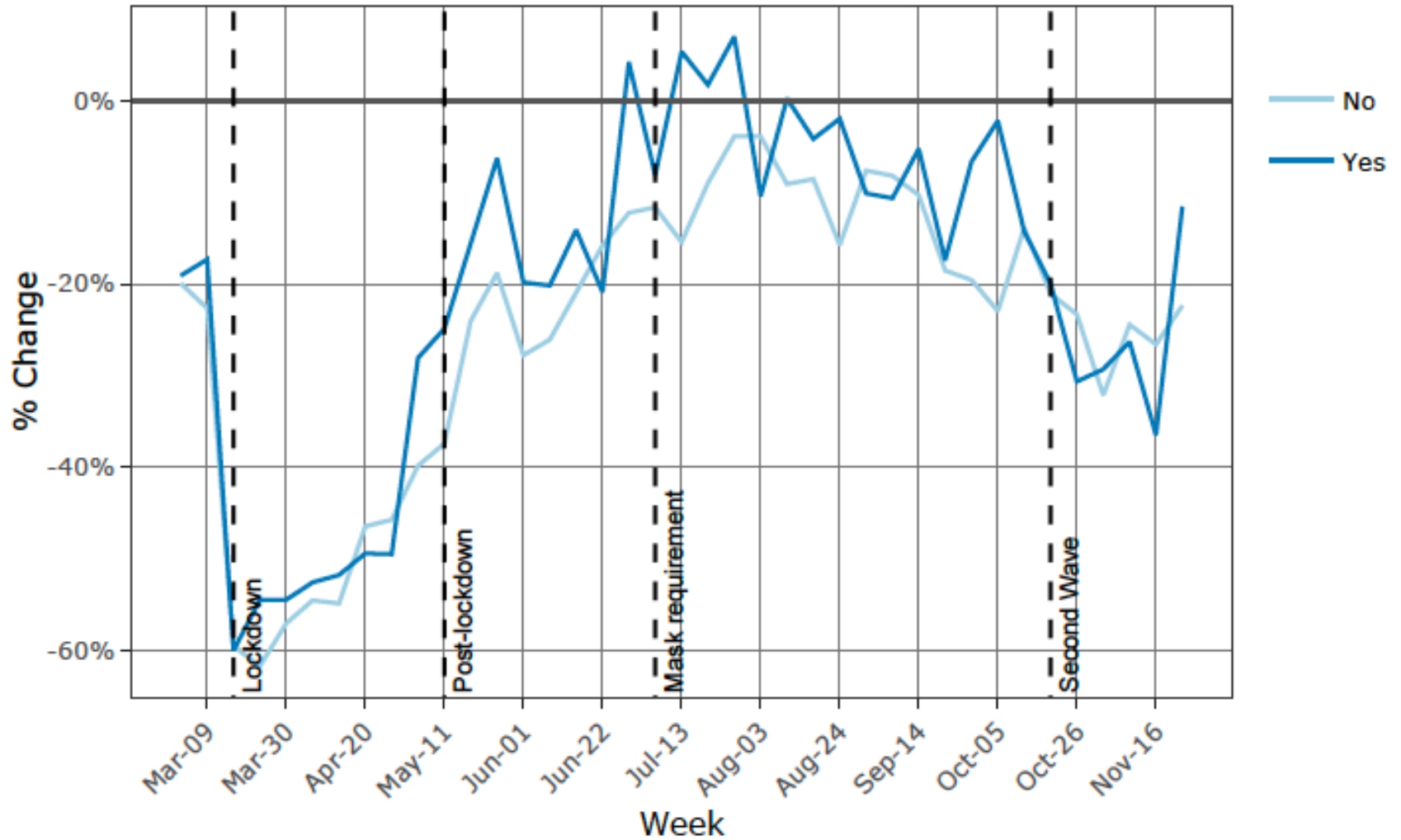


MOBIS/COVID19: PKm, trips and activity spaces

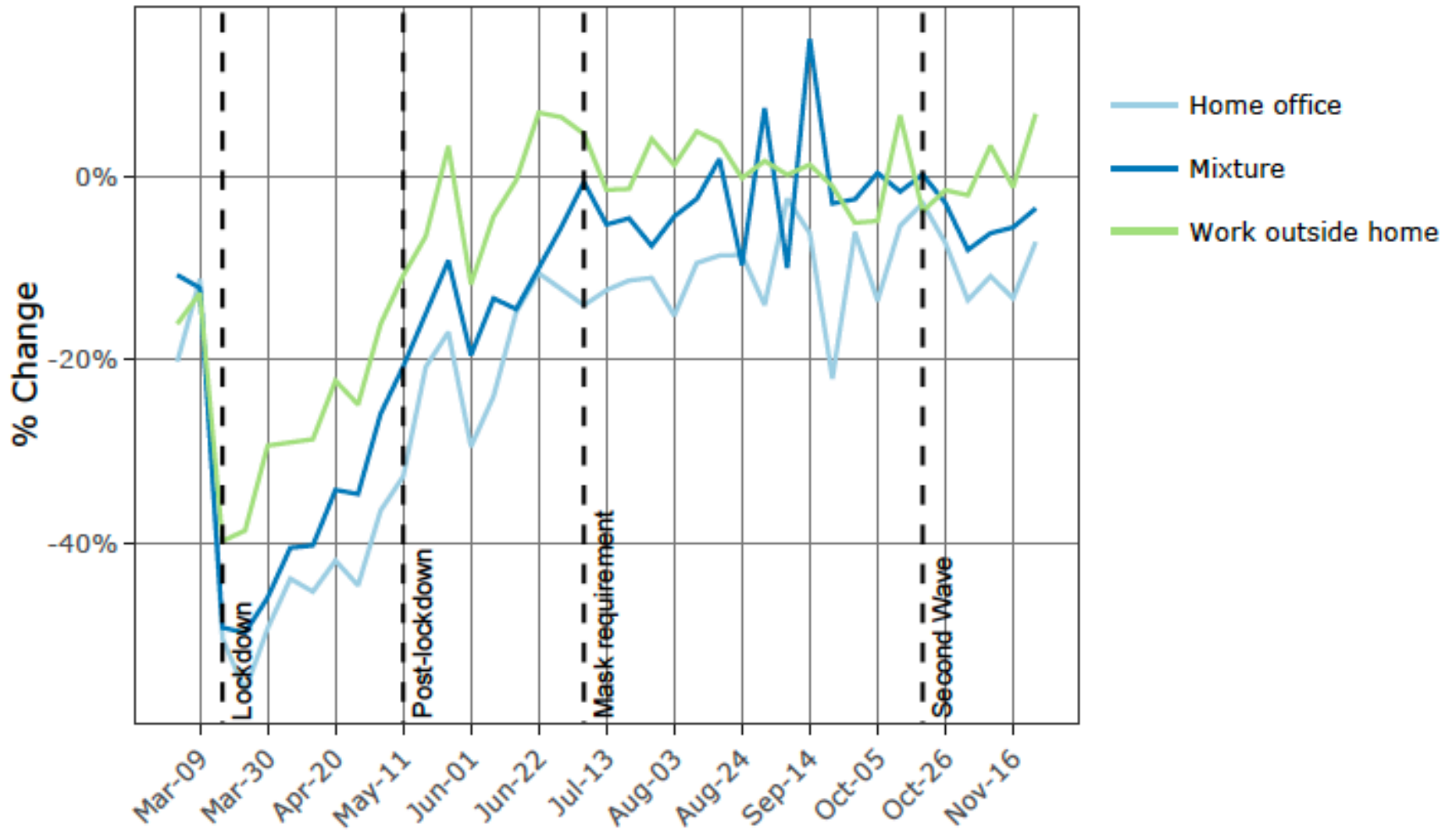
PKm nach Geschlecht



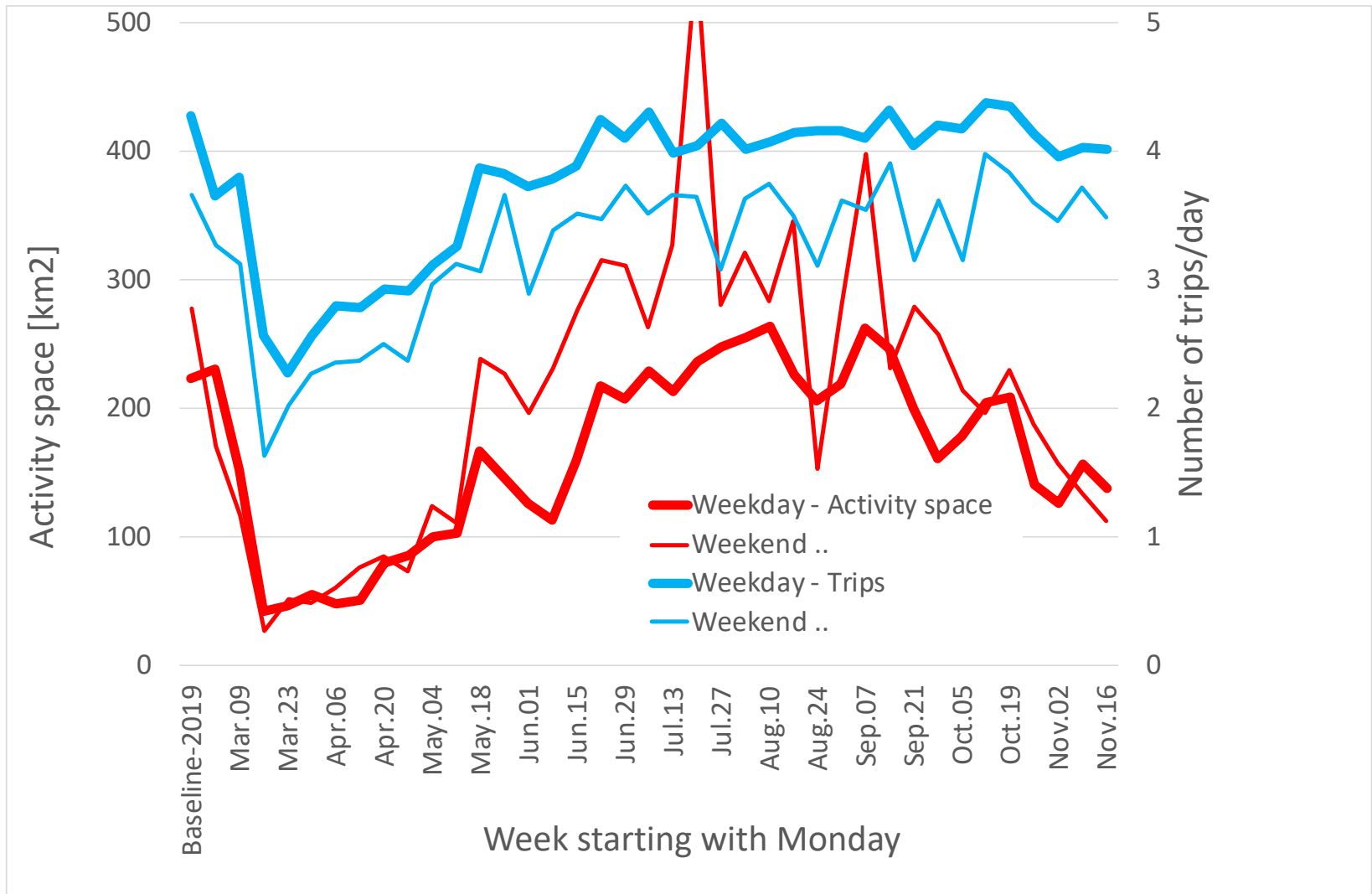
$\Delta\%$ change in VMT for “furloughed” participants



$\Delta\%$ change in trips by work location: WFH impact?

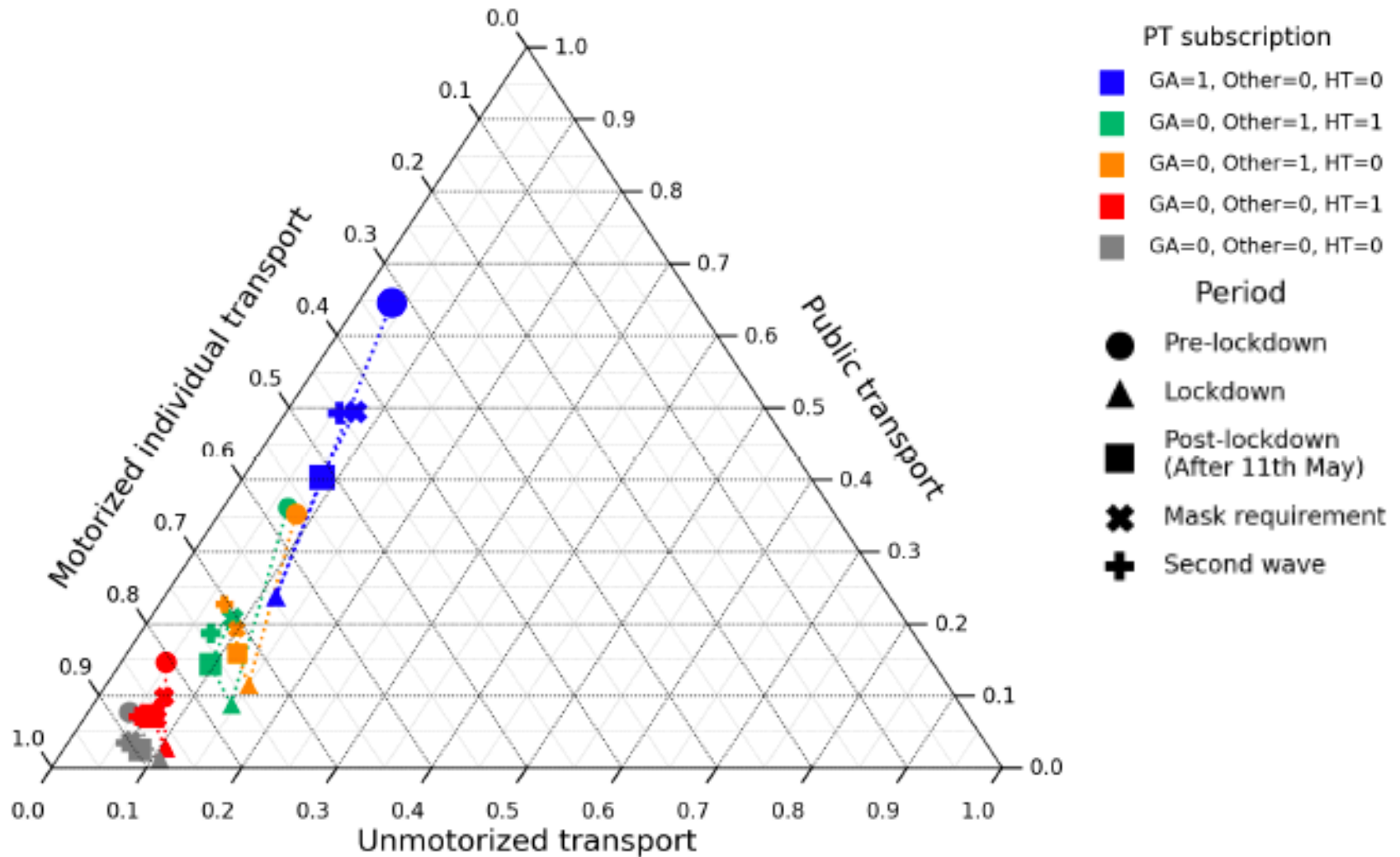


$\Delta\%$ of number of trips and size of activity space

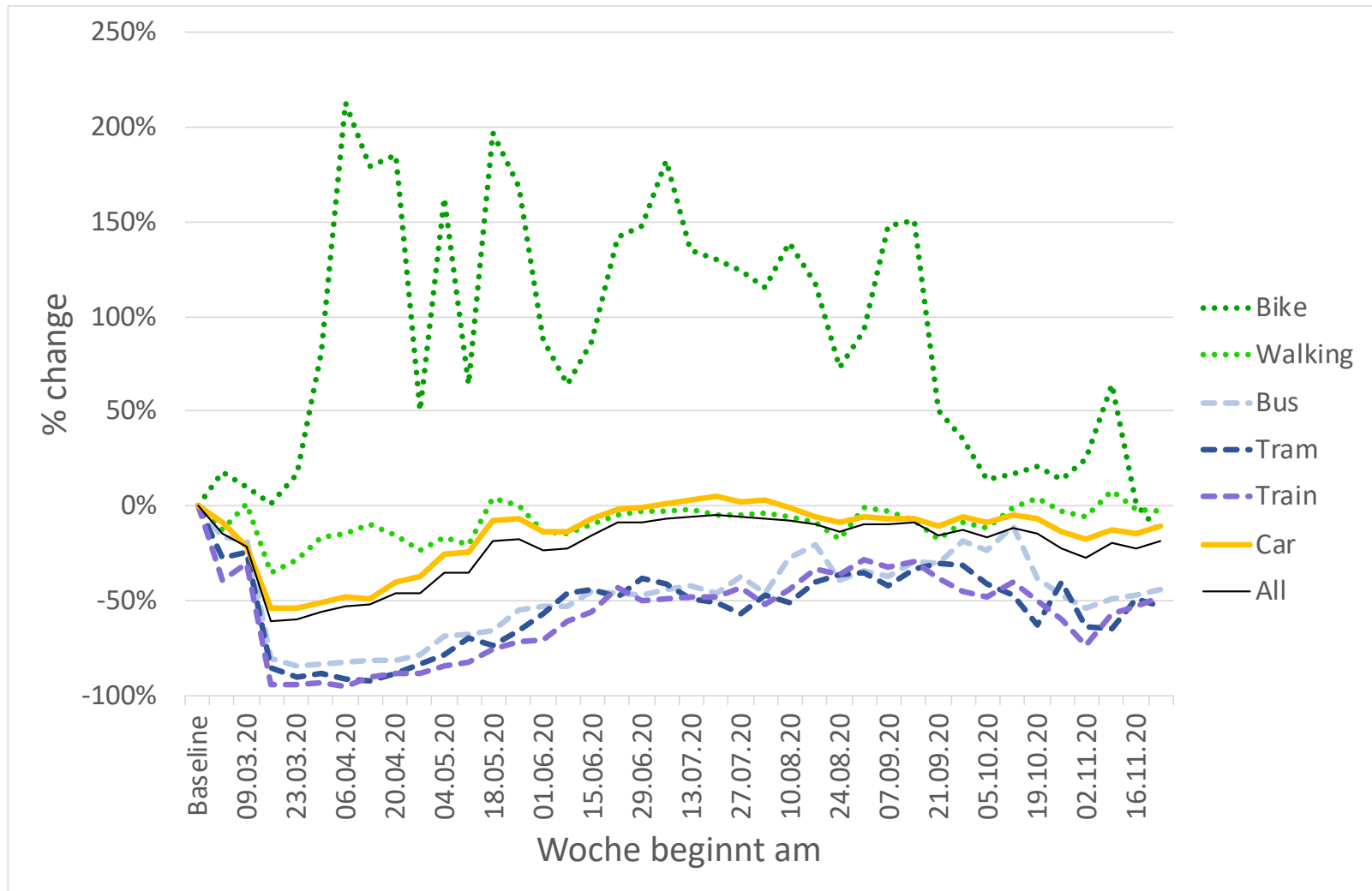


MOBIS/COVID19: Mode choice

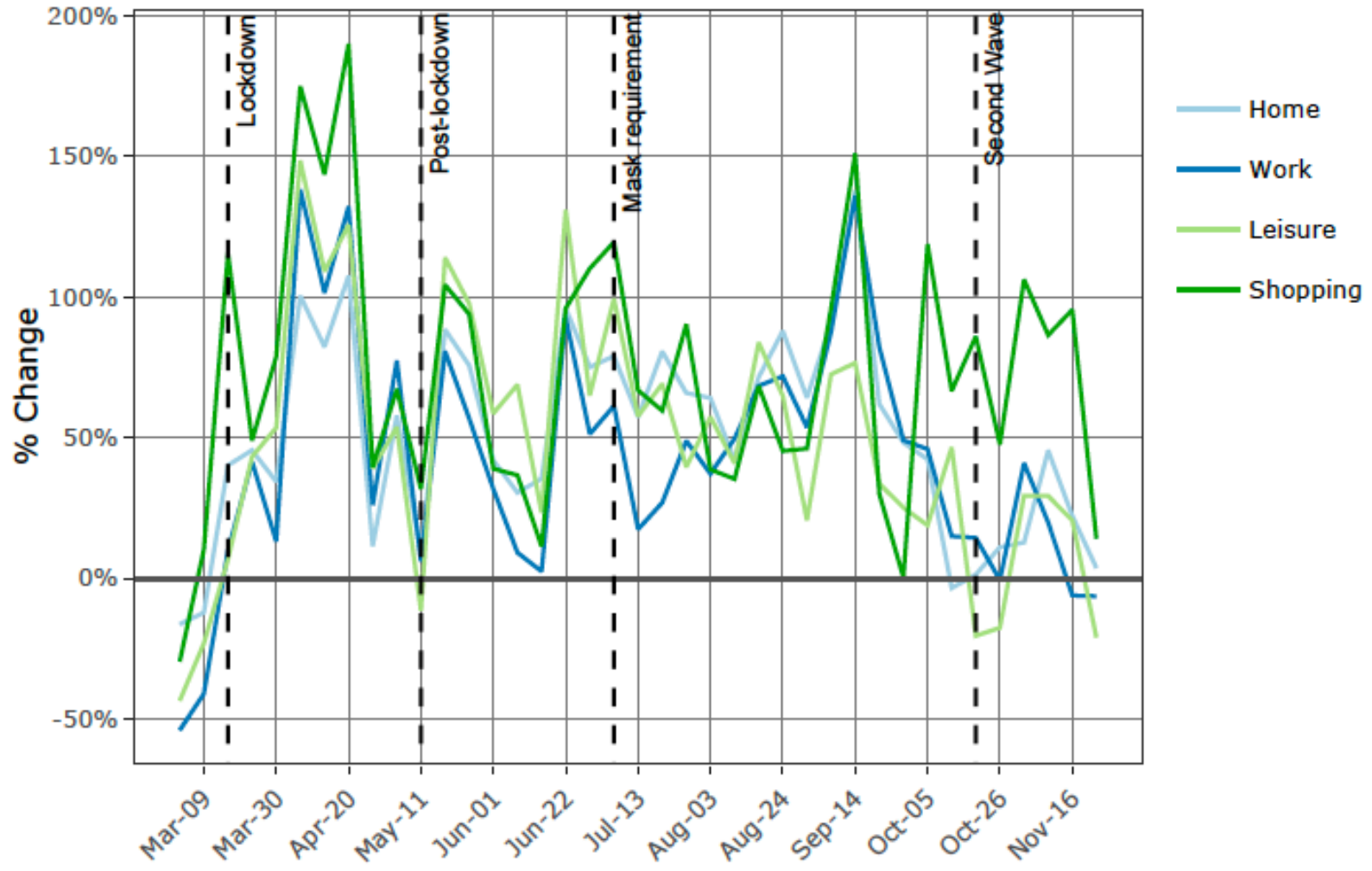
Working day Pkm by mode and phase of the pandemic



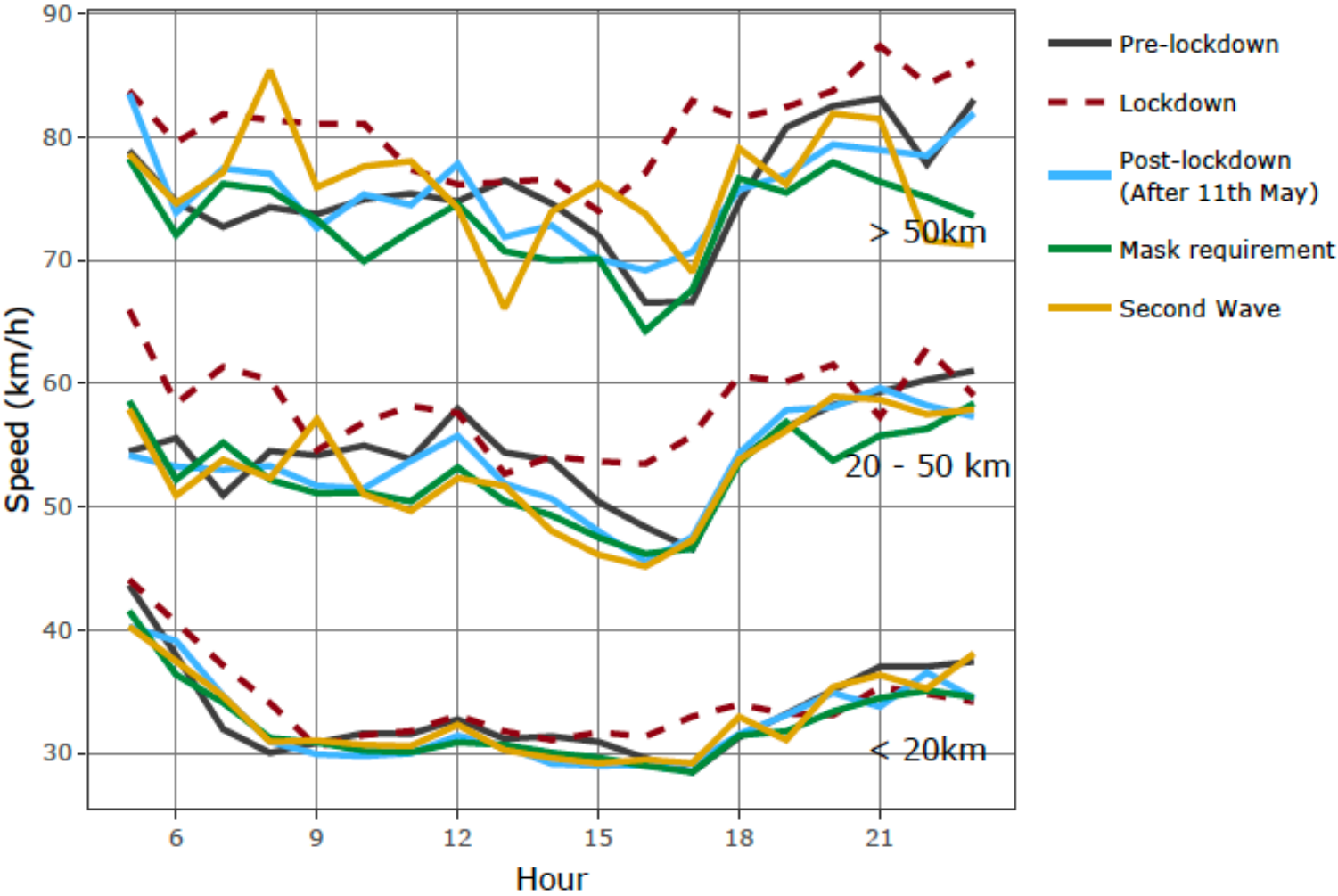
MOBIS/COVID19: PKm change by mode



MOBIS/COVID19: PKm cycling change by (imputed) purpose



COVID19 door-to-door car speeds



Dilemma of transport policy and long term changes

Dilemma of transport policy

Accessibility ~ Productivity ~ Social welfare

Car accessibility ~ Car ownership ~ 1/Commitment to transit use

Accessibility ~ VMT ~ CO₂ emission for current fleet technology

Accessibility ~ Sprawl ~ VMT

Challenge of COVID19 for spatial policy making

Pandemic threat ~ Sprawl ~ VMT

Pandemic threat ~ WFH ~ VMT without control (reorganisation of time)

Pandemic threat ~ WFH ~ 1/productivity without household reallocation of tasks

Sprawl and WFH ~ 1/commitment to transit use ~ congestion

Sprawl ~ 1/spatial equity

Is there a majority for an «e-bike» town?

- Reallocation of street space towards
 - Walking
 - e-bike/bike
 - Express busses
 - Tiny cars/e-scooters
- New bridges/tunnels for the slow modes
- Bike/e-scooter parking
- (Showers and rooms for changing)
- (Further investment in fast large vehicle services ?)
- Subsidies for reliability and frequencies
- Bus/tram priority

Questions ?

ivtmobis.ethz.ch/mobis/covid19/

www.ivt.ethz.ch