

2ND TRANSNATIONAL REPORT ON 13 TWO PILLARS MODAL SPLIT ON DURING MEASUREMENT

D.T3.1.2

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1. Introduction

The results of the first survey (before measurements) were published in the 1st transnational report in July 2017. They showed a high potential of mode-shifts from car-usage to other modes of transport, since 6 of 13 municipalities or institutions showed a modal-split share of single occupancy vehicle of more than 50 percent. In a second survey between April and May 2018 the mode share was evaluated again amongst the employees of 14 municipalities and institutions (local police of Litomerice joined the survey in 2018).

This document contains the results of the second MOVECIT mobility survey during measurement. Due to some project delays not all the partner municipalities have already introduced some measures of the workplace mobility plans which could proof the relevant connections between the results and the mobility plan implementation. But the available data show already some mode-share changes that go in a good direction.

2. Mobility Survey Methodology

The survey was carried out in 14 workplaces across 6 countries. The master questionnaire in English language was translated in local languages. The survey utilized Google online questionnaire in the most workplaces with one exception. The hospital in Litomerice used a paper version of questionnaire due to lack of digital communication channels at the workplace. The data collection period was usually two weeks, surveys were administered from April to May 2018.

The key indicator for MOVECIT project is a modal split statistic, which provides an overall estimation of mobility behaviour. Modal split (or modal share) is a number or a share of trips by each transportation mode. For the purposes of this survey a trip is defined as a person's change in location with an origin and destination, which lies beyond the property on which the participating person lives. One trip may include different stages with different means of transport (e.g. by bike to tram stop and by tram to workplace). The survey does not record different trip stages. The mode of one trip with several stages is assigned to the mode of the longest stage under consideration. Data were collected for trips from 7 preceding days prior the mobility survey administration.

The response rates in 2018 amounted to 30 %, which was 6 % less than in 2017. The Ljutomer municipality managed to gain 100% of responses.

Table 1: Survey response rates

CITY	Workplace	Country	Staff	Responses	Response Rate
BADEN	Municipality	Austria	300	45	15%
BANSKA BYSTRICA	Municipality	Slovakia	261	98	38%
BCS	Békéscsaba Municipality	Hungary	210	69	33%



BKK	Centre of Budapest Transport (BKK)	Hungary	1200	78	7%
BME	University (BME)	Hungary	163	43	26%
BRUCK AND DER MUR	Municipality	Austria	226	22	10%
LEIPZIG	Municipality	Germany	350	113	32%
LEOBEN	Municipality	Austria	380	79	21%
LITOMERICE	Hospital	Czech Republic	878	368	42%
LITOMERICE	Municipality	Czech Republic	218	120	55%
LITOMERICE	Police	Czech Republic	33	15	45%
LJUTOMER	Municipality	Slovenia	29	29	100%
MODENA	Municipality	Italy	1608	691	43%
MOEDLING	Municipality	Austria	300	54	18%
TOTAL			6156	1824	30%



3. Mobility survey results

3.1. Transnational Results in 2018 (Commuting)

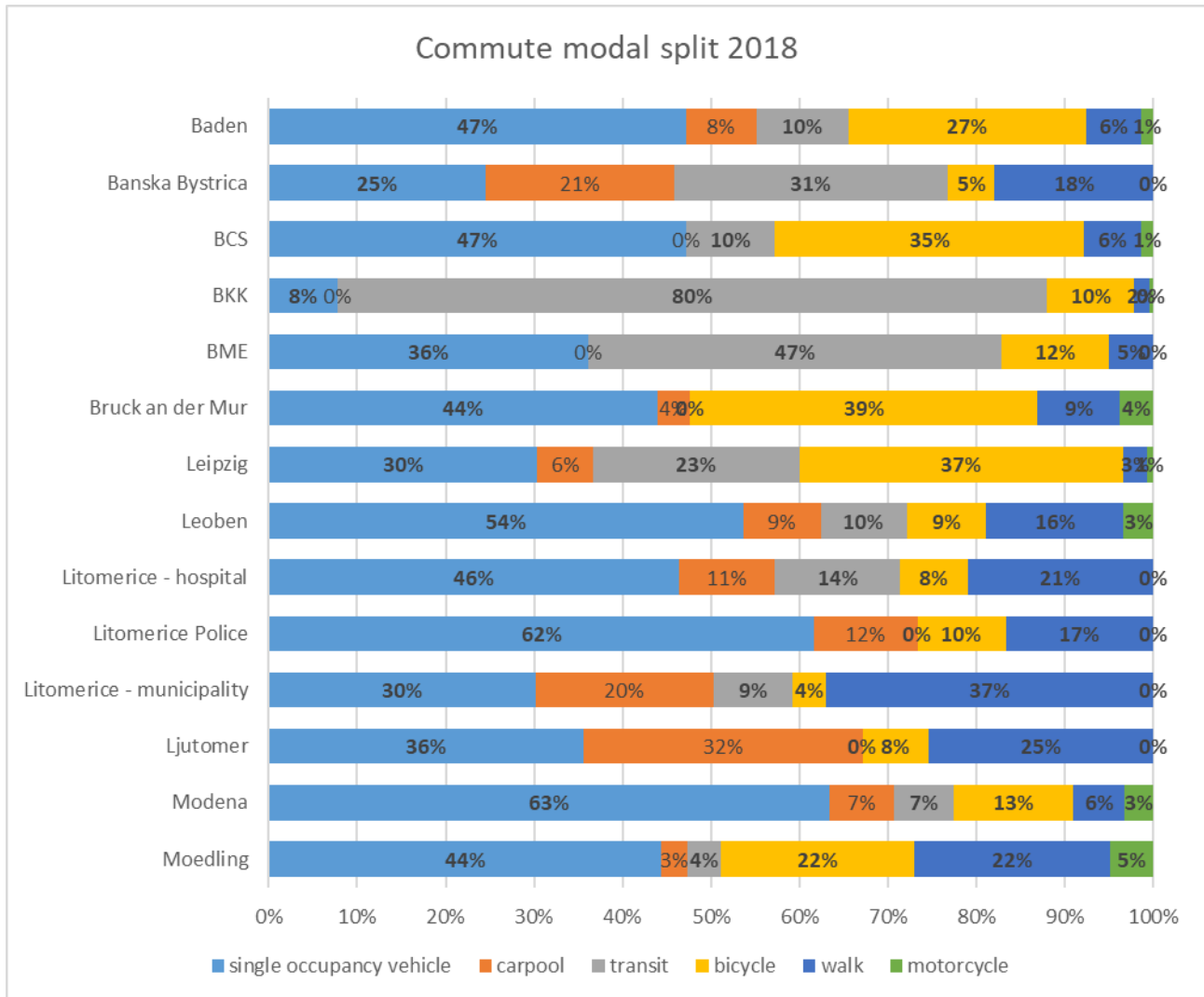


Figure 2: Modal-Split Overview 2018

The 14 municipalities and institutions taking part in MOVECIT project differ strongly in nature and size of the city or workplaces as well as in infrastructural aspects like the extension of bike network or public transport systems.

Most of the 14 examined municipalities and institutions have one thing in common: the predominant car usage. This situation has not changed a lot compared to the first survey. In 3 of 14 cases the modal split shares of *car-usage* (single occupancy vehicle) was 50 % or higher. Modena (Italy) shows the highest share of car-usage in modal split results with 63 %, followed by Litomerice Police with 62% and Leoben (Austria) with 54%.

Exceptional cases are the Budapest Centre of Transport (Hungary), which has 80% share of *public transport* whereas in Ljutmer (Slovenia) employees do not commute by public transport at all (0%).



Litomerice Municipality (Czech Republic) shows the highest mode share for **walking** (37%). In Modena (Italy) and Leipzig (Germany), both densely urbanized cities, and also at the Budapest University (Hungary) walking shares are low.

Leipzig and Bruck an der Mur show the best share for **cycling** with 37 % and 39 %.

Ljutomer and Banska Bystrica have significant shares of **car-pooling** (32 % and 21 %).

Motorcycling seems not to be relevant in the 13 MOVECIT municipalities and institutions.



3.2. Modal split change between 2017 and 2018

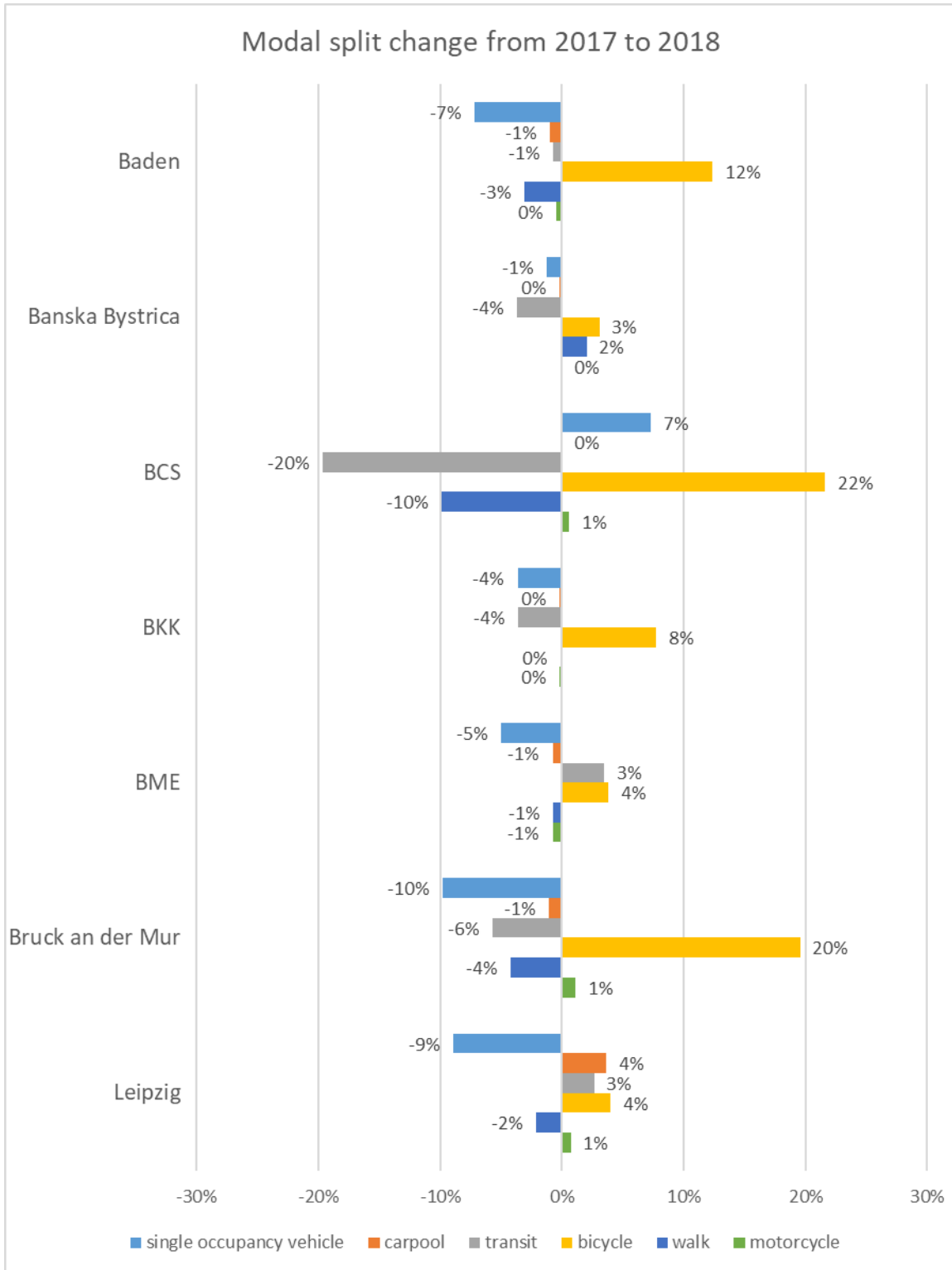


Figure 1: Modal split changes part 1

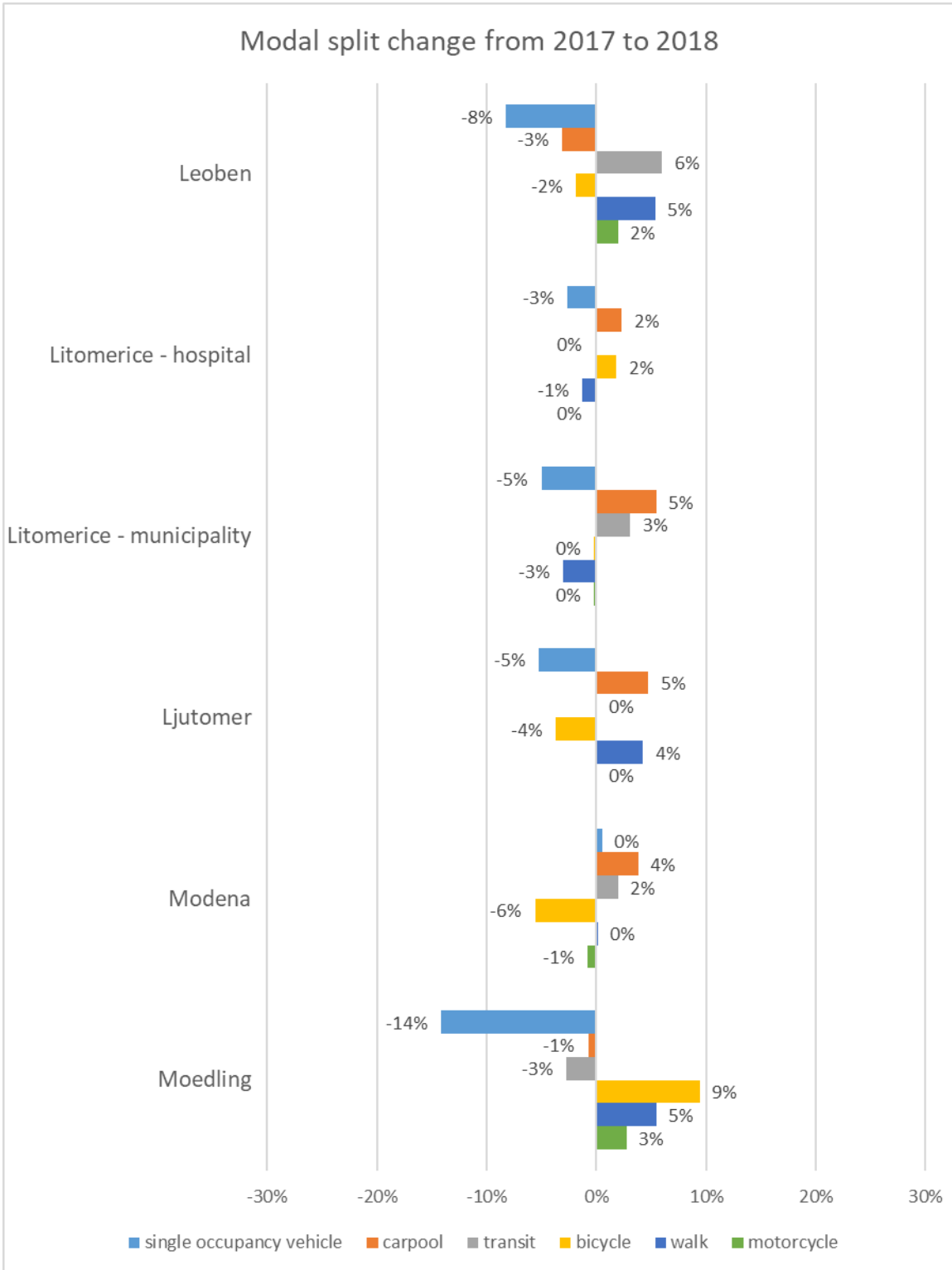


Figure 2: Modal split changes part 2

The above tables show the compared results from 2017 and 2018, which indicate the first changes and trends in commuting behaviour in the participating municipalities and institutions. The light blue bars show the changes in single car usage. The car usage amongst the employees has dropped in nearly all cases, which is a pleasant trend concerning the MOVECIT project goals.



The summarized mode changes provide results that indicate a trend of decreasing car usage for commuting and an increase in cycling. Single occupancy car use dropped by 5 %, carpooling increased by 1 %. Unfortunately, public transport and walking decreased by 1%, whereas cycling increased by 6%.

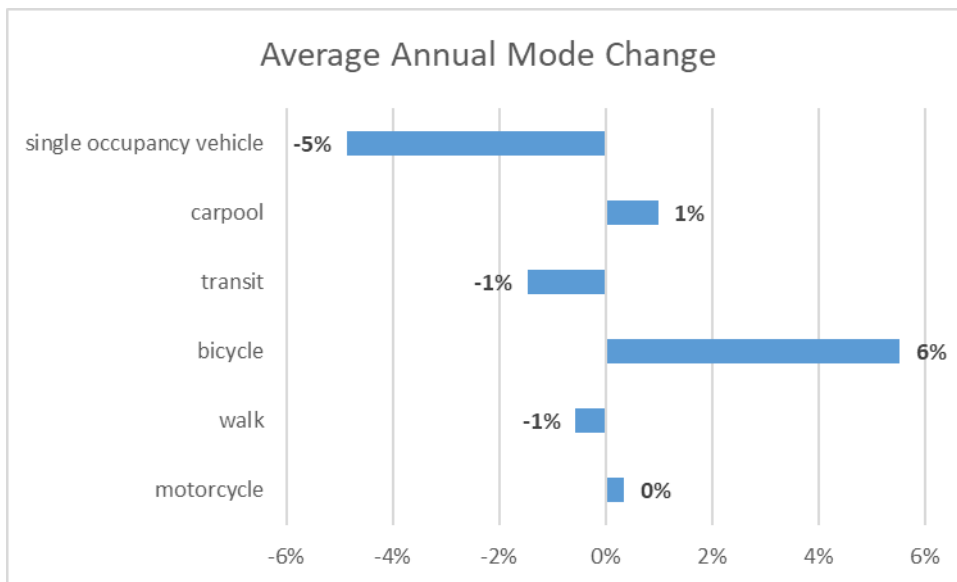


Figure 3: Average for all workplaces



4. Results Business Trips

The second pillar of the modal-split survey was the mode choice of employees at business trips and service routes. In the questionnaire two types of business trips were asked:

- Business trips within the municipality
- Business trips beyond the municipality

Due to changed methodology, the data from 1st mobility survey cannot be compared with data from 2nd survey.

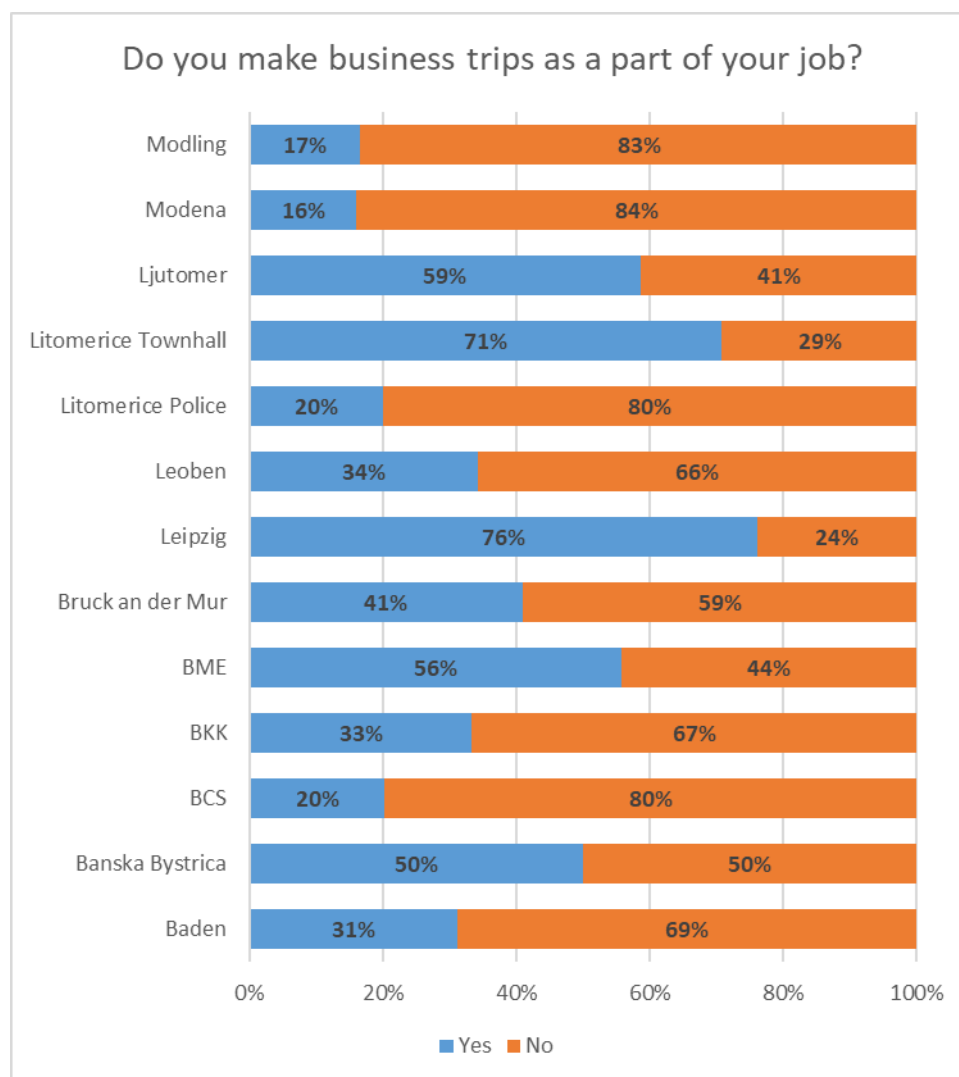


Figure 4: Shares of businesstrips

The amount of people having to make businesstrips varies strongly between the 14 municipalities. Ljutomer, Litomerice townhall, Leipzig and Banský Bystrica have shares of 50% or more, whereas eg Moedling and Modena have share less than 20%. In connection with the actual number of people and the size of the sample these numbers are to be considered as not representative, but can be seen as indicators.



4.1. Business trips within the municipality

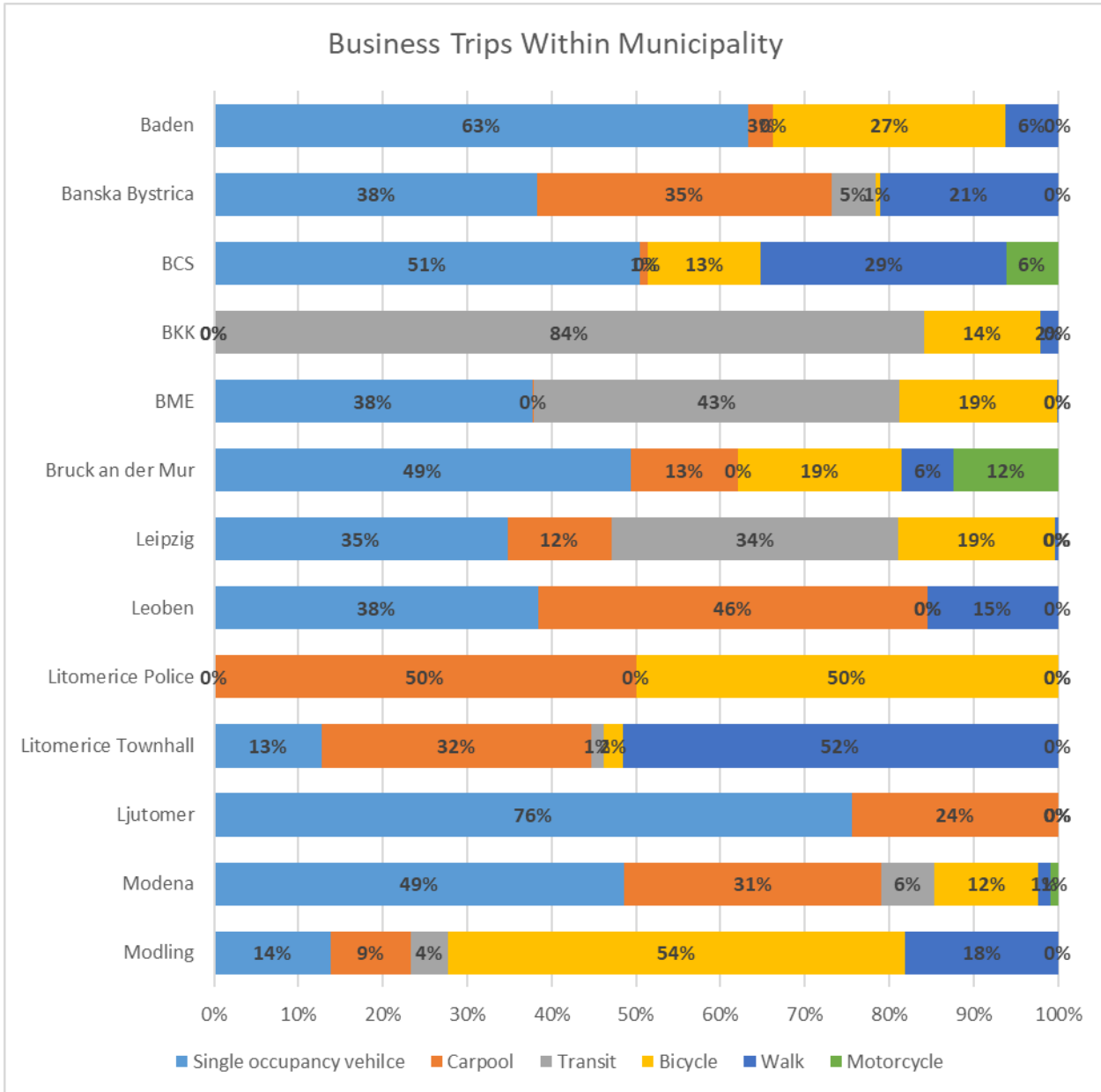


Figure 5: Modal-Split Business trips within municipality

Concerning business trips and service routes within the border of the respective municipalities car use (single occupancy vehicle) is less dominant compared to the commuting trips (see chapter 3.1). But together with carpooling it is obvious that the car is once more the most dominant means of transport.



4.2. Business trips beyond the municipality

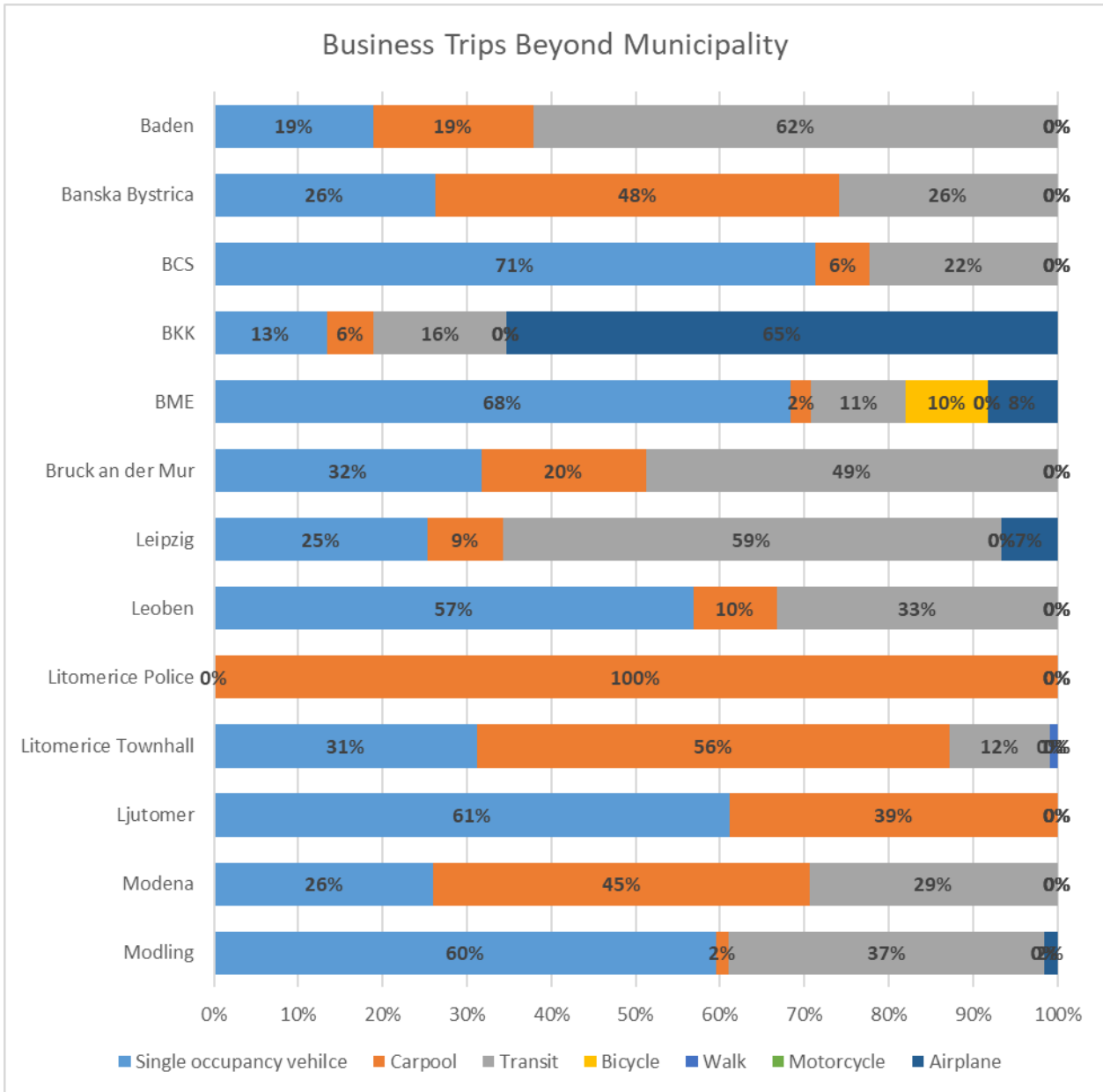


Figure 6: Modal-Split Business trips beyond municipality

When it comes to business trips beyond the municipality the share for car use and carpooling show the highest amounts. For very long distances the air plane comes into account. Walking and Biking is not relevant anymore due to higher trip distances. Again, these numbers must not be seen representative as the number of people asked is low.



5. Findings

Commuting

In the first survey 6 out of 13 workplaces had a car-usage of over 50 % in modal-split. Now, after the implementation of some measures of the developed WPMs, only 3 out of 14¹ workplaces have more than 50 % of car-usage share. The mode-shares for car-usage dropped or remained equal in 13 out of 14 workplaces.

In 5 cases the car-usage share in modal-split showed a significant decrease of more than 5%: Moedling (-14%), Békéscsaba (-20%), Bruck an der Mur (-10%), Leipzig (-9%), Leoben (-8%) and Baden (-7%).

Carpooling had significant shares in Ljutomer (SI), Banska Bistrica (SK) and Ljutomer (CZ) in the first survey of 2017 and increased in 2018. In other municipalities car-pooling is not relevant or the implementation of measures has not yet started.

The modal-split for biking has risen in 9 of 13 cases, in some municipalities quite significantly eg. in Békéscsaba (HU) with +22%, or Baden (AT) with +12% and Moedling (AT) with +9 %. This is partly due to the implementation of measures, such as the renovation of showers and covered cycle stands at the city hall of Baden or the new bike service station with 68 additional parking spots at Moedling train station, but also due to good spring weather throughout the period of the survey.

Business trips

Since the survey mode changed from 2017 and 2018 the results for the mode-shares for business trips are not comparable.

The results show high shares of car usage but the actual number of people doing business trips differs strongly and the results must not be seen representative.

Summary and recommendations

This 2nd survey show only marginal influences of MOVECIT measures because too less measures were already implemented.

In some cases, other citywide measures eg. Leipzig JobRad could have had impact on travel behaviour changes.

The size of samples (ie. responses) was rather low in some cases so that modal split changes are not scientifically justifiable. For the next and final MOVECIT travel survey in spring 2019 the participation to the questionnaire should be promoted more effectively.

¹ In the 3rd project period one additional workplace started to take part, i.e. Litomerice Police