



VELO-CITY 2013
THE SOUND OF CYCLING
URBAN CYCLING CULTURES
VIENNA, JUNE 11 - 14



University of Natural
Resources and Life
Sciences, Vienna



Cycling cities – e-bikes included!

Experiences and strategies of smart (e-)cyclists

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- Growing number of cyclists and e-cyclists in cities
- Challenge for road users and for policy makers
- Risk potential of e-cycling
- Coping with potential risks





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SEEKING 
safe e-biking



Some impressions



Team: AIT, BOKU, KfV, Carinthia, strombike

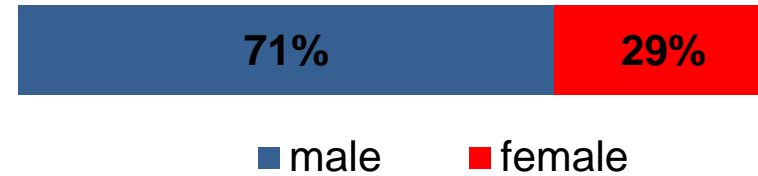
Project funded by the Austrian Road Safety Fund



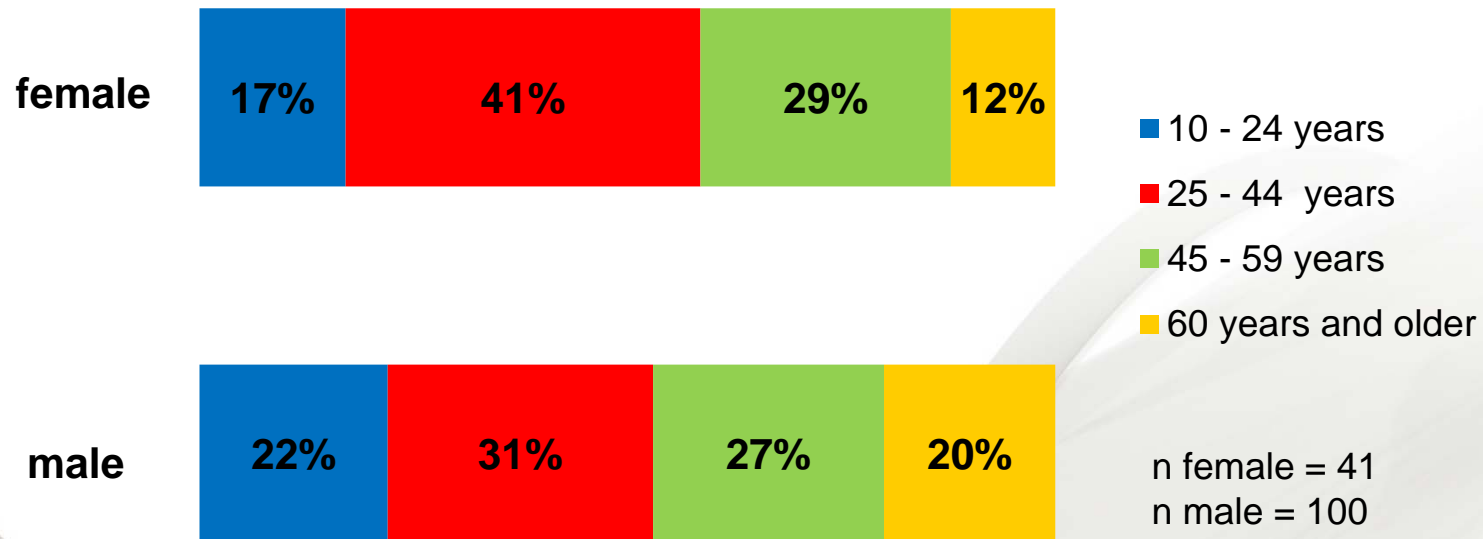
- Two field studies (Vienna and Klosterneuburg/A):
 - (1) test rides
 - (2) interviews with cyclists and e-cyclists
- Cycling expertise and experiences
- Interactions with other road users
- Strategies to ride safely in road traffic
- Acceptance of measures

Social demographics

Gender (n = 141 persons)



Age distribution





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Conflicts when cycling

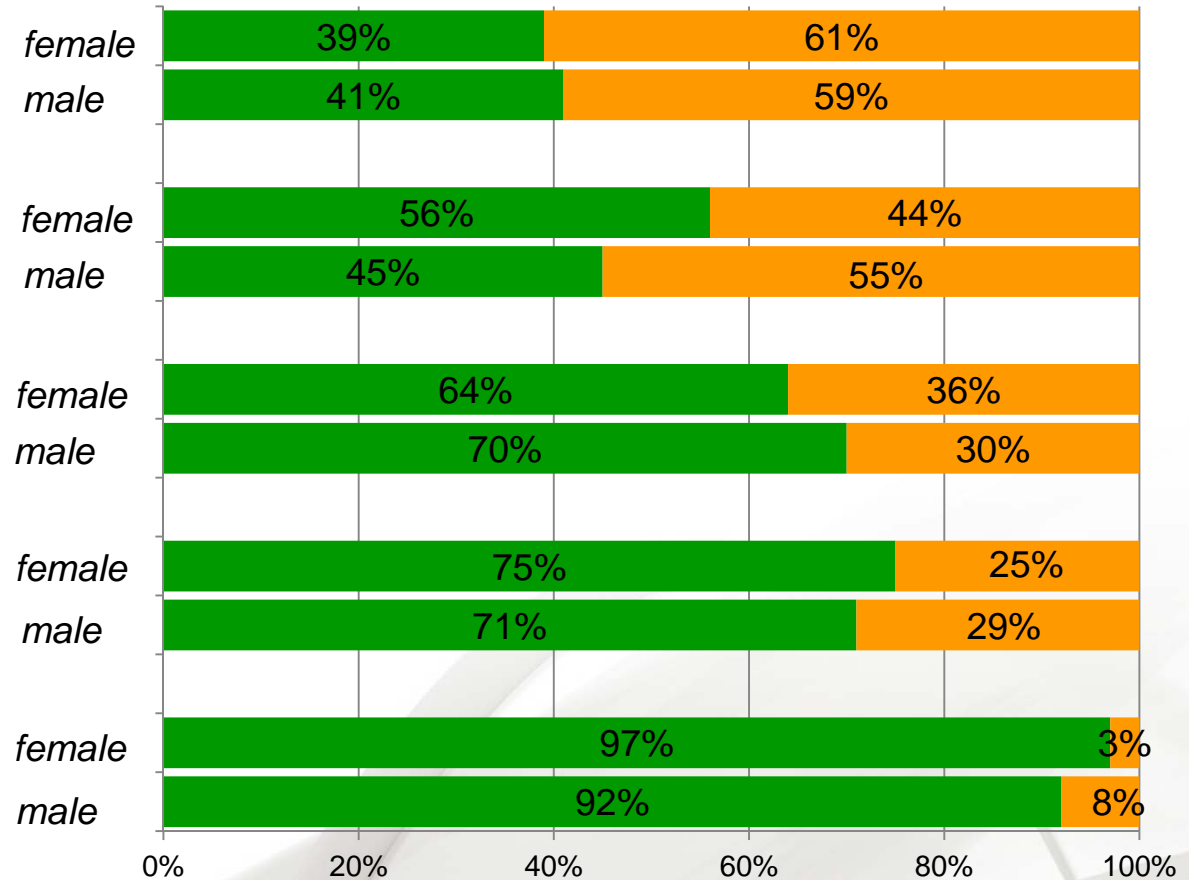
Dangerous situations, conflicts with ...

... car drivers

... cyclists

... pedestrians

... others



n female = 36 n male = 91

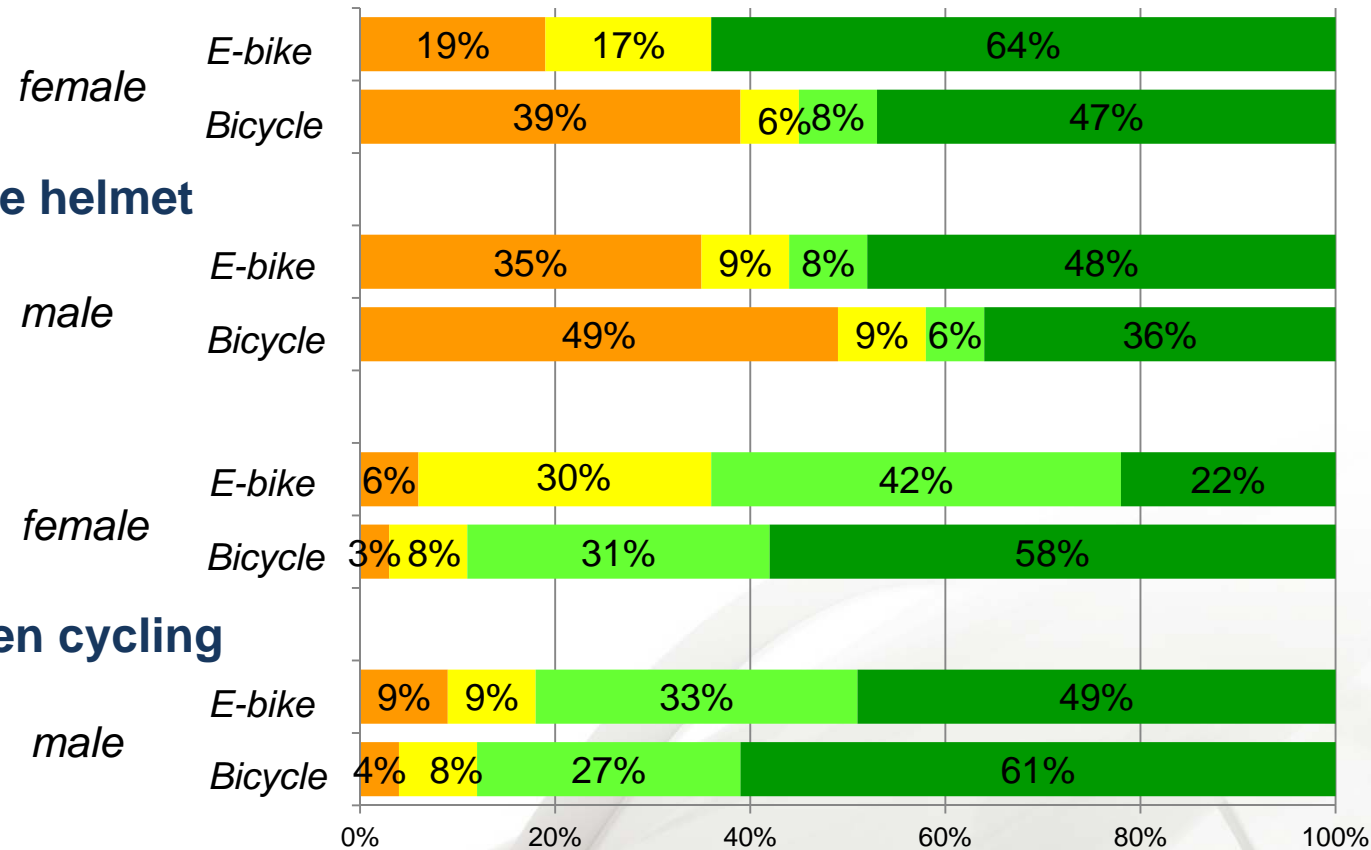
■ no ■ yes



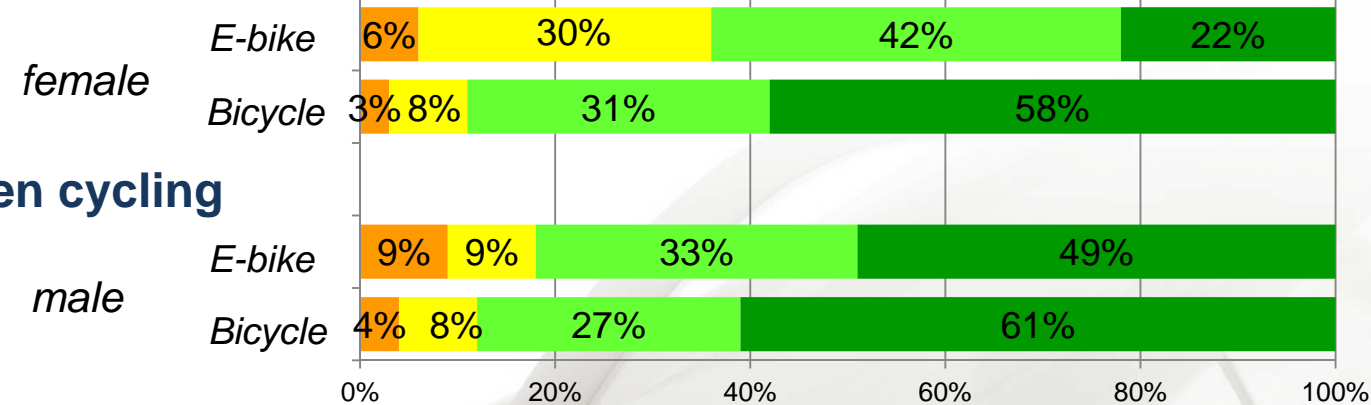
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(E-)Bike Safety

Wearing a bicycle helmet



Feeling safe when cycling



n female = 36 n male = 91

■ definitely no
 ■ probably no
 ■ probably yes
 ■ definitely yes



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Safety Strategies for e-cycling

Dismount in crowded pedestrian areas.

Sometimes cycling on pavement.

Always cycling on bike facilities.

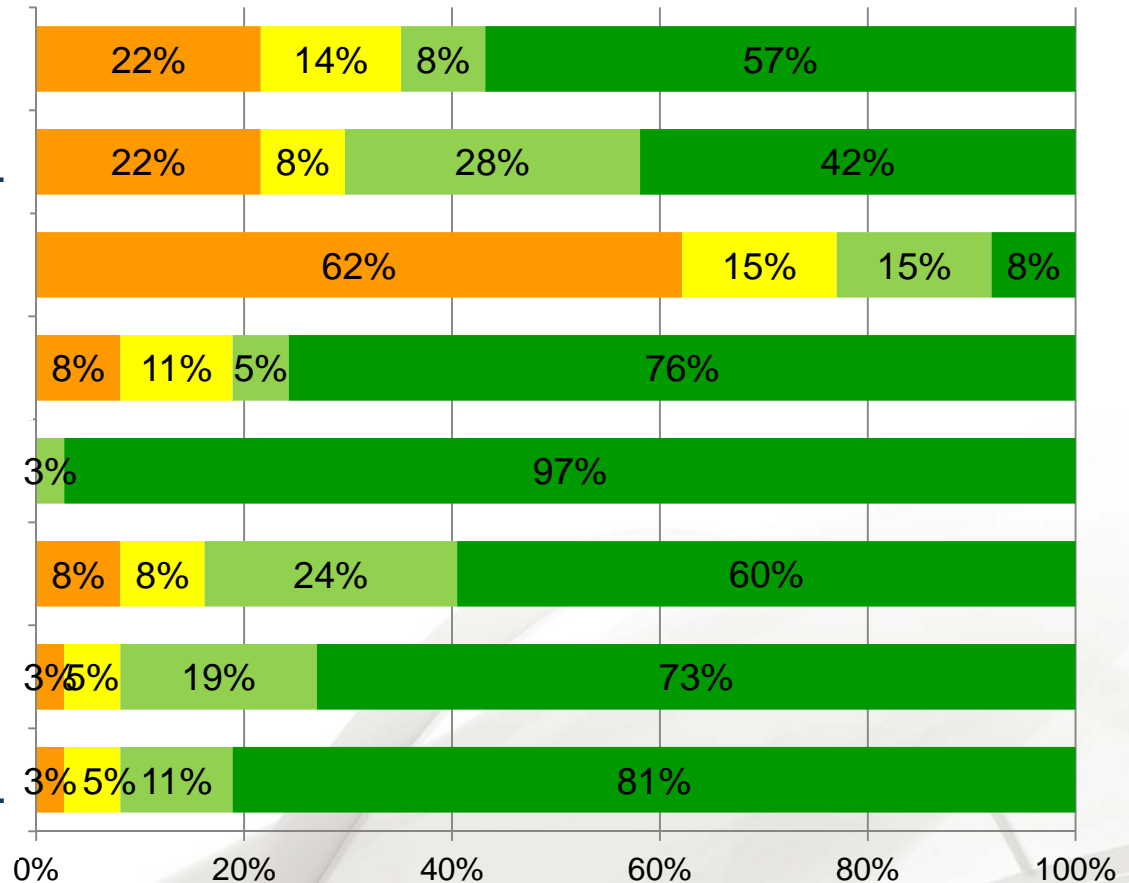
I give way to cars when necessary.

I respect pedestrians.

I bike defensively.

I break in good time.

I adapt my speed to the situation.



n = 34 active e-cyclists

■ definitely no
 ■ probably no
 ■ probably yes
 ■ definitely yes



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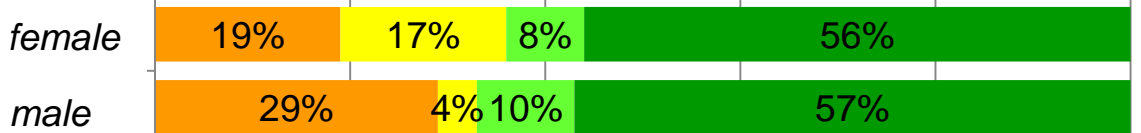
Acceptance of measures I

Rating of bike infrastructure and e-bike policies ...

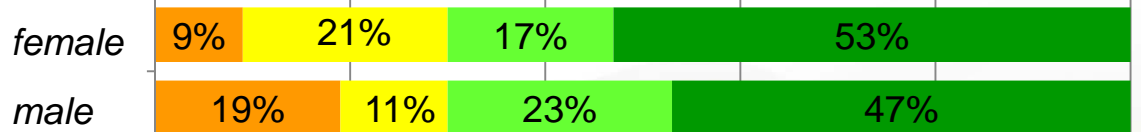
E-cyclists should rather use the road than bike paths.



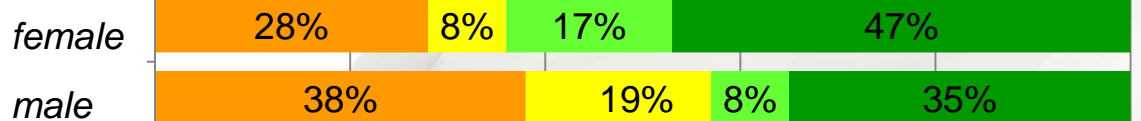
The use of bike paths should be compulsory.



Bike infrastructure is too narrow for e-bikes.



E-bike speed limited to 25 kph.



0% 20% 40% 60% 80% 100%

n female = 36 n male = 91

definitely no probably no probably yes definitely yes

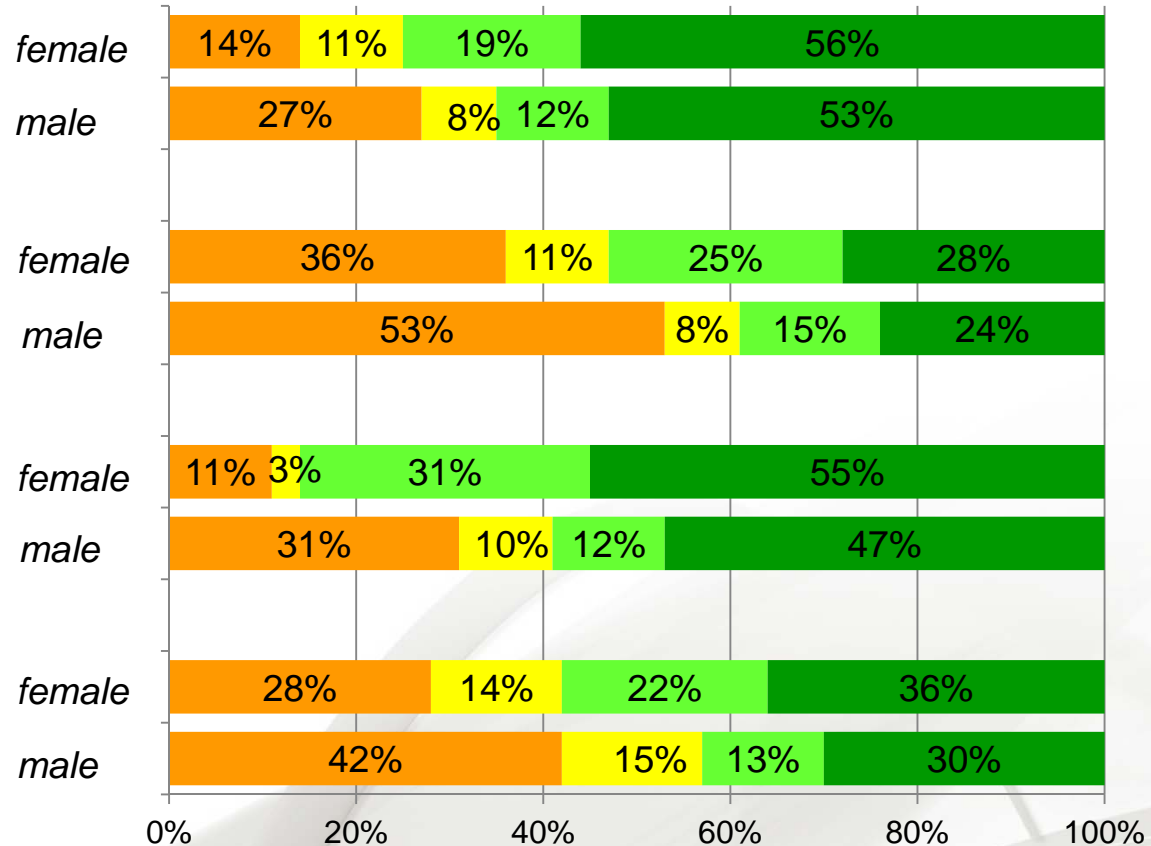


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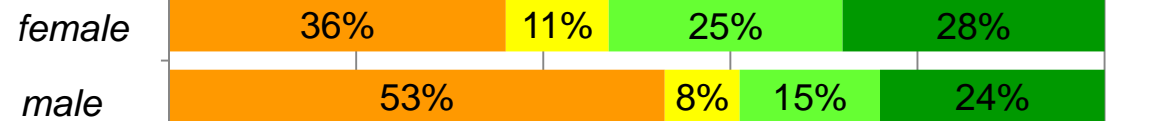
Acceptance of measures II

Regulations and policies for e-cycling ...

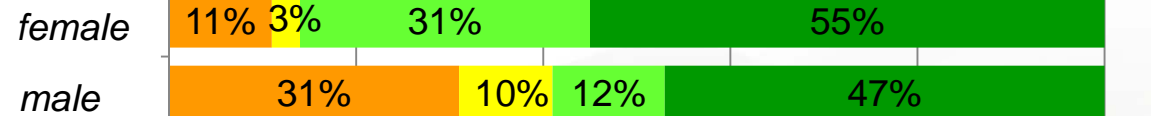
E-cyclists must wear a helmet.



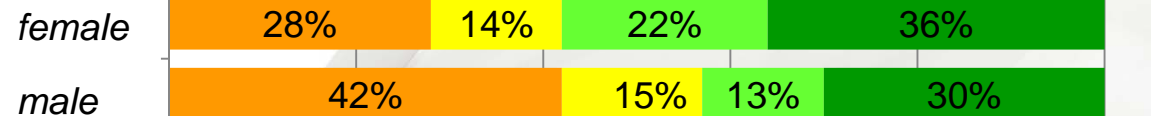
E-bikes must have licence plates.



Compulsory testing of traffic rules.



Compulsory training for e-cyclists.



n female = 36 n male = 91

■ definitely no
 ■ probably no
 ■ probably yes
 ■ definitely yes



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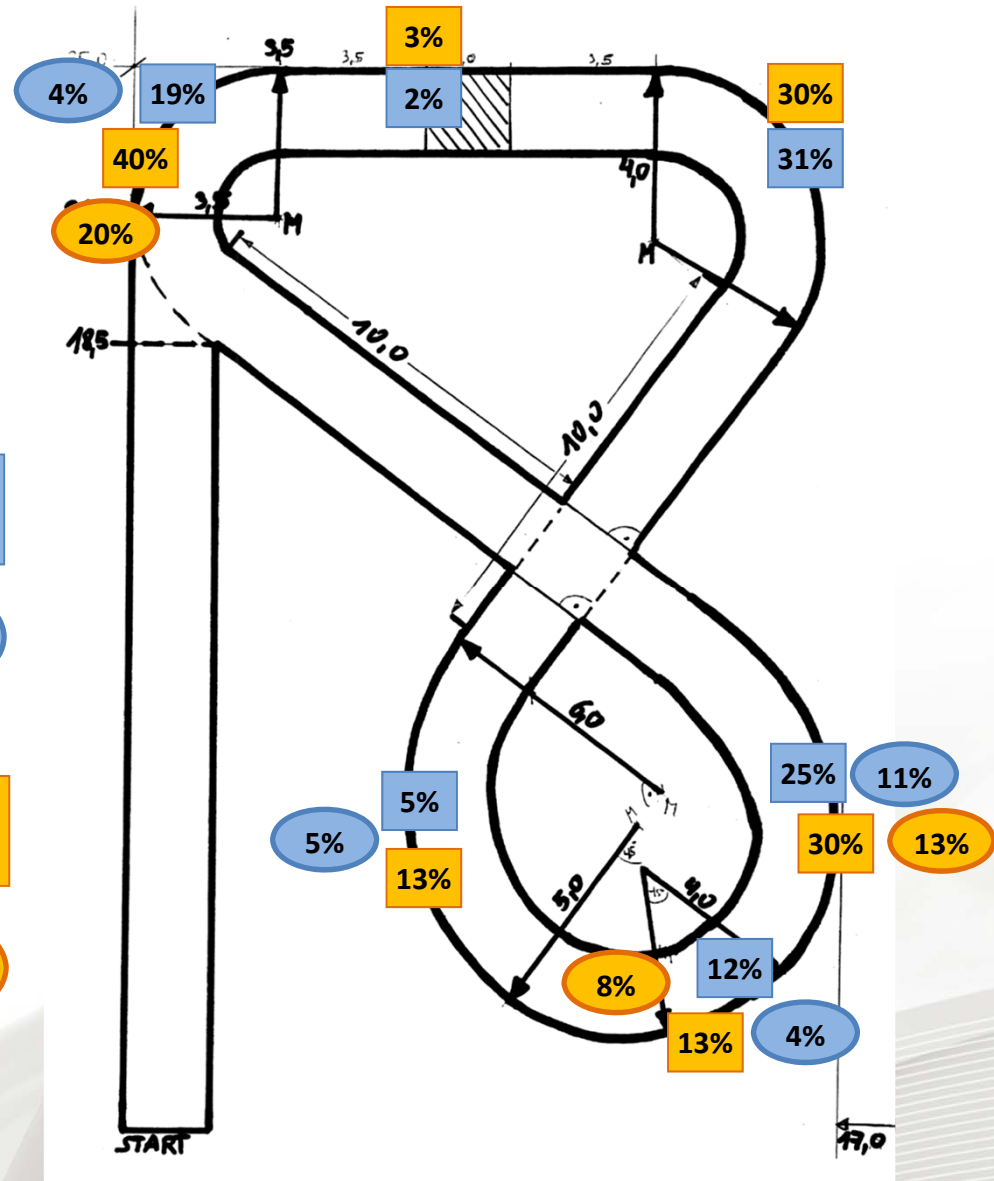
Problem spots experienced by test persons ...

male
E-BIKE

male
BICYCLE

female
E-BIKE

female
BICYCLE



- Most test rides problem-free
- High awareness of road risks
- Seniors as typical e-bike users
- Riding an e-bike – easy for experienced cyclists
- Policy measures needed

- Exact legal specifications of e-bike categories
- Recommendation for wearing a bicycle helmet
- Cycling infrastructure:
e-cyclists permitted to ride on cycle paths ...
- ... BUT construction standards should be adapted!
- Trainings & courses



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Thank you for your attention!

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E-bike interviews and test rides: 141 test persons

100 male (71%)

41 female (29%)

28 male
(28%) active
e-cyclists *

72 male
(72%)
no e-bike
experience

6 female
(15%) active
e-cyclists *

35 female
(85%)
no e-bike
experience

91 male
(91%) active
cyclists*

9 male
(9%)
occasional/
(non-)cyclists

36 female
(88%) active
cyclists*

5 female
(12%)
occasional/
(non-)cyclists

* Kilometres travelled by bicycle or by e-bike last year > 10 km