

# **Cycling** and (or ?) **Trams**

Can we support both?

**Experiences from Berne, Switzerland**

**Roland Pfeiffer, Departement for cycling traffic, City of Bern**

# A few words about Bern...

Fachstelle  
Fuss- und Veloverkehr  
Stadt Bern



**Stadt Bern**  
Direktion für Tiefbau  
Verkehr und Stadtgrün



# A few words about Bern...

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Fuss- und Vel<sup>o</sup>verkehr  
Stadt Bern



**Stadt Bern**  
Direktion für Tiefbau  
Verkehr und Stadtgrün



- **Capital of Switzerland**
- **130'000 inhabitants**
- **150'000 commuters**

# A few words about Bern...



## Not ideal conditions for cycling...

- Very hilly: many ups and downs
- UNESCO World Heritage
  - ⇒ cobble stones
  - ⇒ conservation is very important



# A few words about traffic in Bern...



## Modal Split of trips

- 26 % by public transport
- 12 % by bike
- 32 % by foot
- 30% by car





## How we support biking

### Departement for cycling and pedestrian traffic

- 2 persons
  - 1.2 millions CHF per year
- The goal is to double the amount of biking

# How we support biking in Bern...

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## Increase the amount of public bike-parkings (now 10'000)



# How we support biking in Bern...



## Open all one way streets for the bike-counterflow

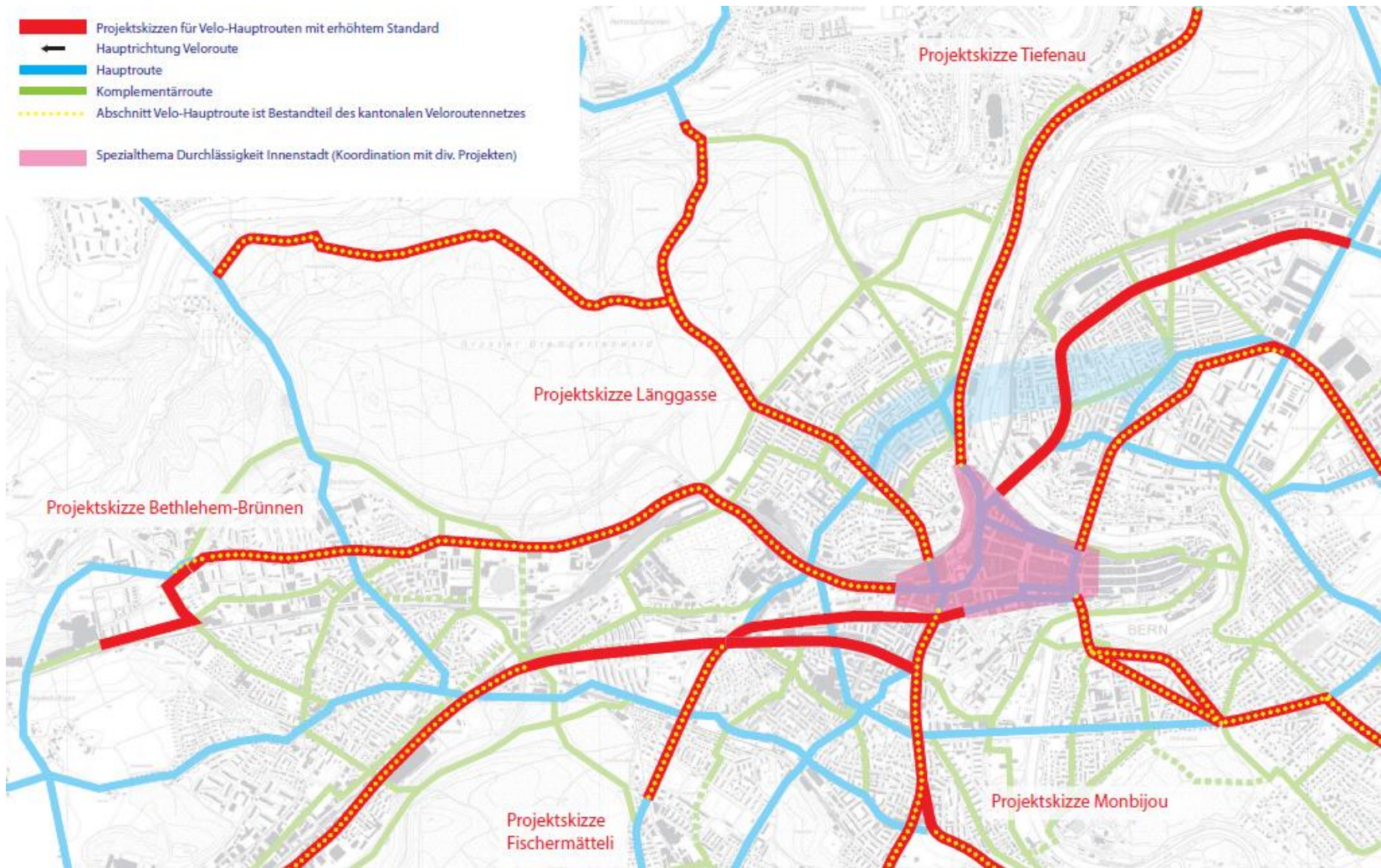




# How we support biking in Bern...



## Bike «fast» lanes are planned – also with green waves for cyclists



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## More clearly signed bike lanes



# How we support biking in Bern...

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## A new cycling bridge over the Aare valley



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## Public bike sharing system



# How we support biking in Bern...

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## Public bike sharing system in Bern



**Will this be enough to double  
the amount of bike trips?**

**Could we do more?**

**And in which field?**

**Where is the most potential?**

# Some facts...

## Money

for biking: 1.2 Mio/year

for public transport: 55 Mio/year

## Public parking

for biking: 10'000 => 10'000 m<sup>2</sup>

for cars: 25'000 => 250'000 m<sup>2</sup>



**What is the reason why  
you do NOT use your bike  
in the city?**



**Public transport is so good: 89 %**

**Rain and bad weather: 74 %**

**Car and motorbike is easier: 60 %**

**The bike gets stolen: 58 %**

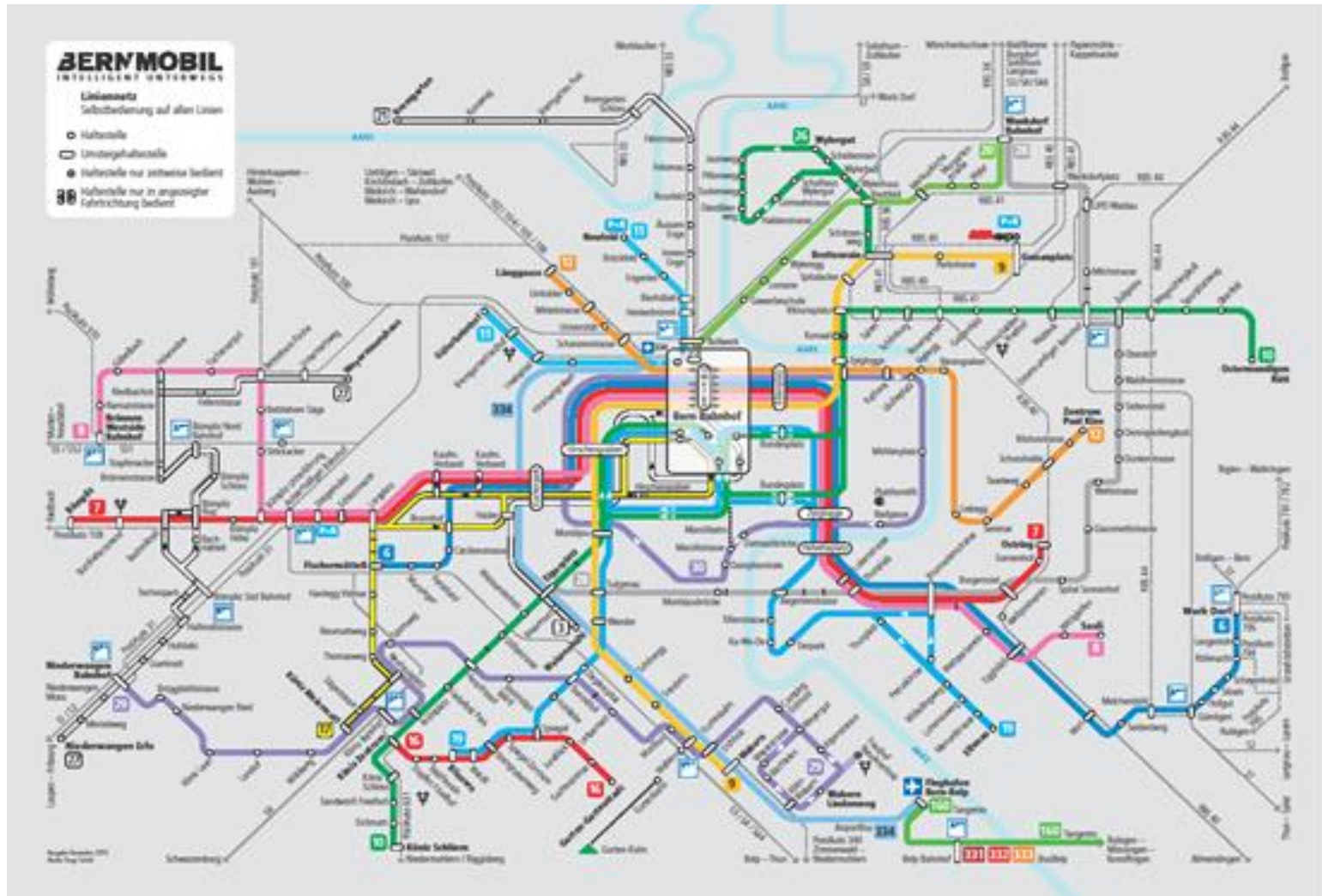
**Afraid of falling and safety: 50 %**

**Don't want to sweat: 45 %**

**Too many hills: 44 %**



# Excellent public transport system



**Bern, as many other cities, planned (still plans) to expand the tram system**

**The main discussions were: (and still are):**

- Tram stops
- Tram tracks
- Traffic lights for trams



# trams and cycling...



## Tram stop – cycle way behind the tram stop:

- it's going up, cyclists are slow
- works very well
- best case: but just in one spot in Bern (lack of space)

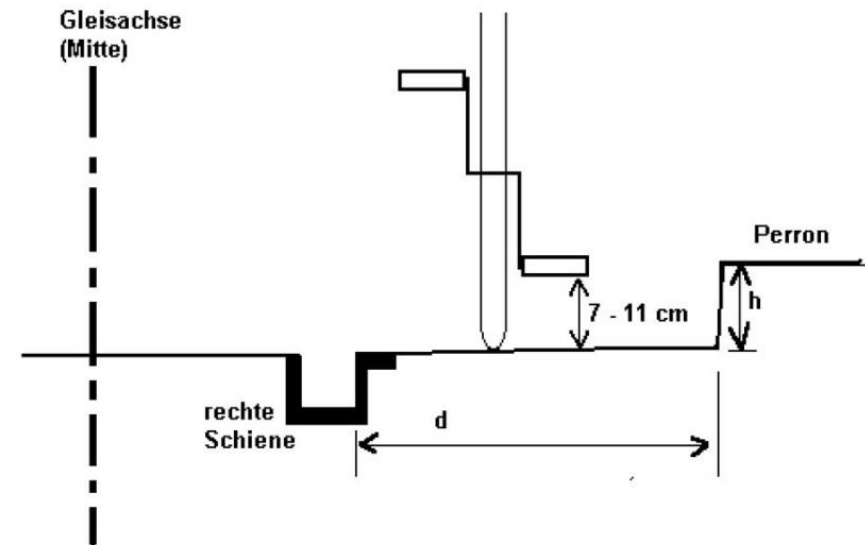
# tram stops and cycling...



## Tram stop – cycle way behind the tram stop:

- Example from Heidelberg in Germany
- Clearly divided between pedestrians and cyclists to avoid conflicts

# tram stops and cycling...



## Most tram stops:

- Not enough space behind the stop
- Bikes are on the road
- For handicapped people  
⇒ high curbs necessary

## Compromise:

Height curb:  $h = 24 \text{ cm}$

Distance track – curb:  $d = 90 \text{ cm}$

The distance is most important!

# tram tracks and cycling...



**Crossing the tracks can be very challenging for cyclists**

⇒ **No track crossing under 30 degrees**

**Solution:**

- ⇒ **Bikes go to the right to get a better crossing angle**
- **but not always possible**

# tram tracks and cycling...

- ⇒ **Cyclists use the sidewalk**
- **No problems when there are not many pedestrians**



**Sometimes with a special traffic light for cyclists**





## Special tracks for bikes => System «STRAIL»

- No more grooves along the tracks
- Trial operation in Geneva
- Cyclists are happy with the system
- But the public transport tram company is not so happy...
- Until now limited range (only on straight tracks)

## roundabouts with traffic lights...



**Roundabouts in Bern have traffic lights to speed up the trams**

- Often cyclists have to wait without reason
- These red lights are not accepted by the cyclists

⇒ **Passage for bikes**

**Works very well without problems**

# traffic lights and cyclists...



## Traffic lights for trams to speed up the public transport



⇒ Cyclists and pedestrians have to wait a long time

# traffic lights and cyclists...

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...and wait and wait and wait...

# traffic lights and cyclists...

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...and then you go...  
...but it's still **red**

# Conclusion

Promoting public transport is necessary and good

⇒ But don't forget the cyclists 😊



...or...



