

Walking & Public Transport

Potentials and Possibilities



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Walking – what is it?





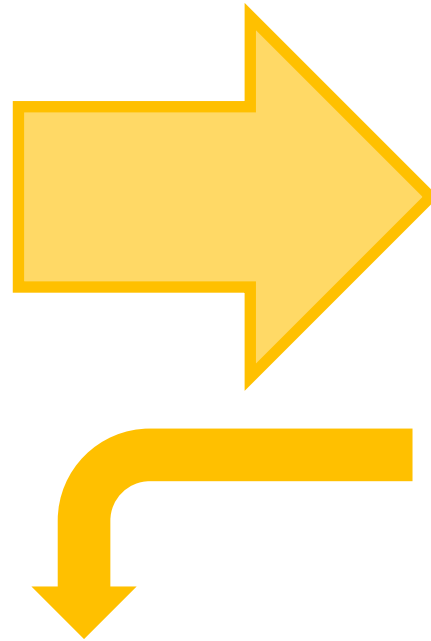
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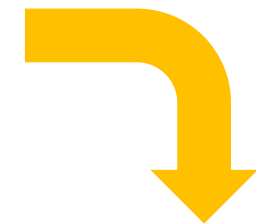
Walking is an outdoor mobility

1

Urban environment



Impact walking experience



1. Emotions

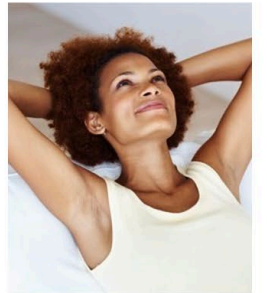
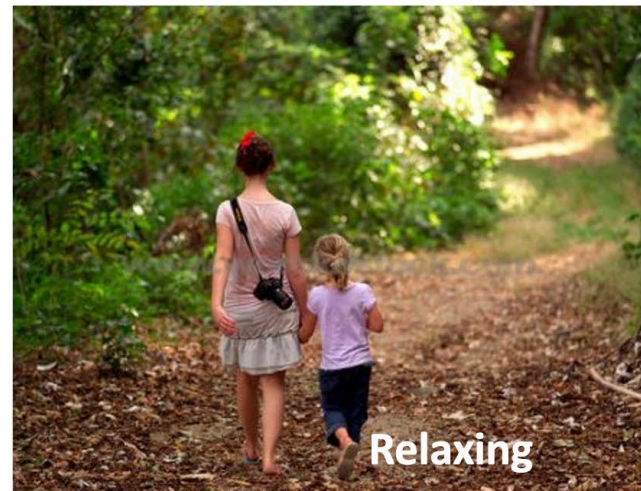
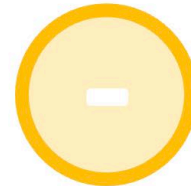
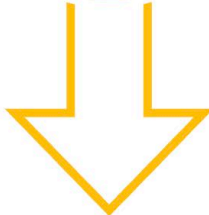


2. Perception of time



1

Environmental influence on emotions



1

Environmental influence on walking distance



Variation distance perception **30%**

+12% +17% +9% +10%

Variation of perceived walking distance

No «soft factor»!



-9% -14% -11% -10%

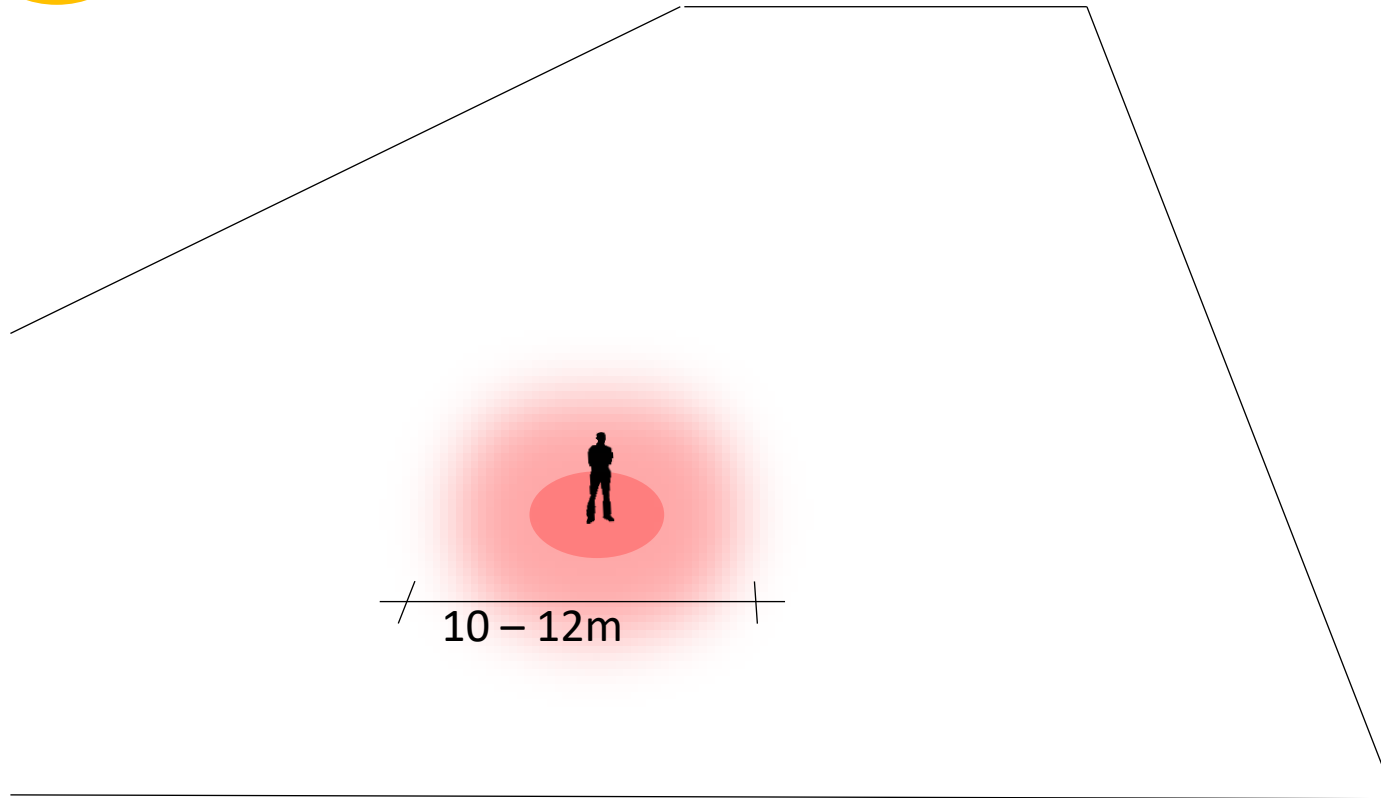
1 Urban design principle 1



Variation!



1 Urban design principle 2



Environments in human scale



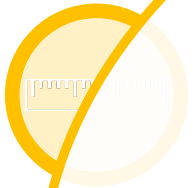


What we reach on foot



Perception of

1. Travel time
2. Distance
3. Speed



1

What we reach on

The urban environment influences

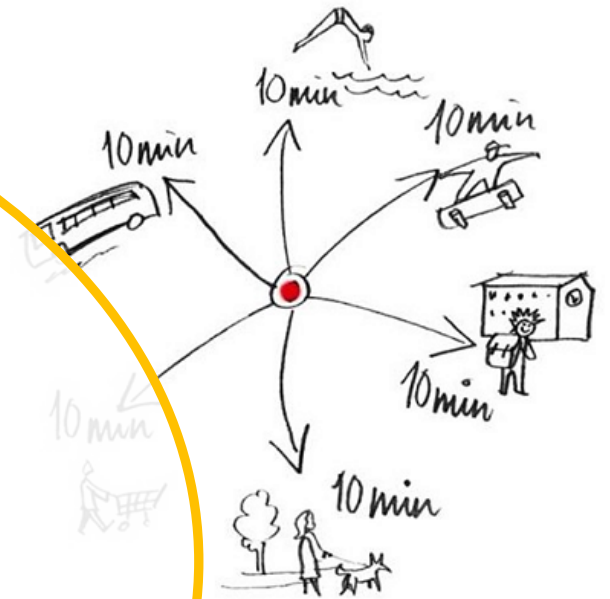
1. if we walk

2. how far we walk

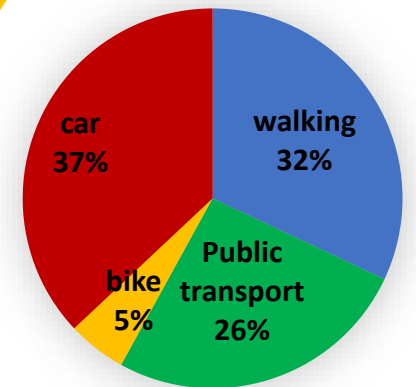
Emotions



Choice to walk



Modal split



How we choose to travel

2



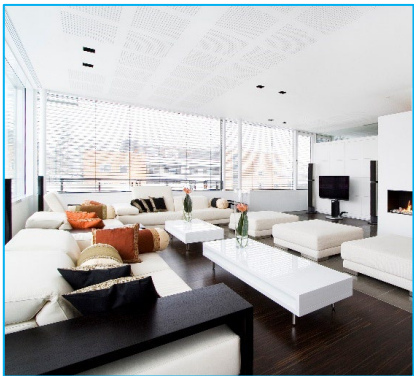
Walking & Public Transport



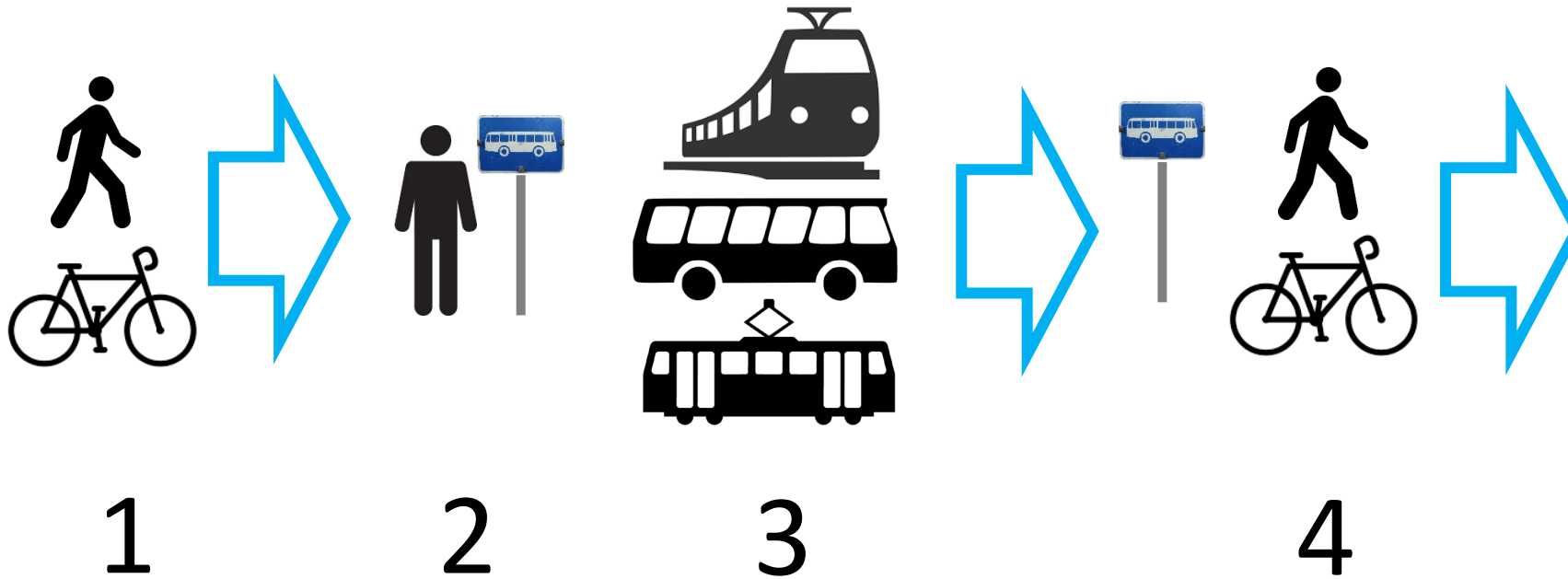
2

Public transport: one journey - four trips

Home



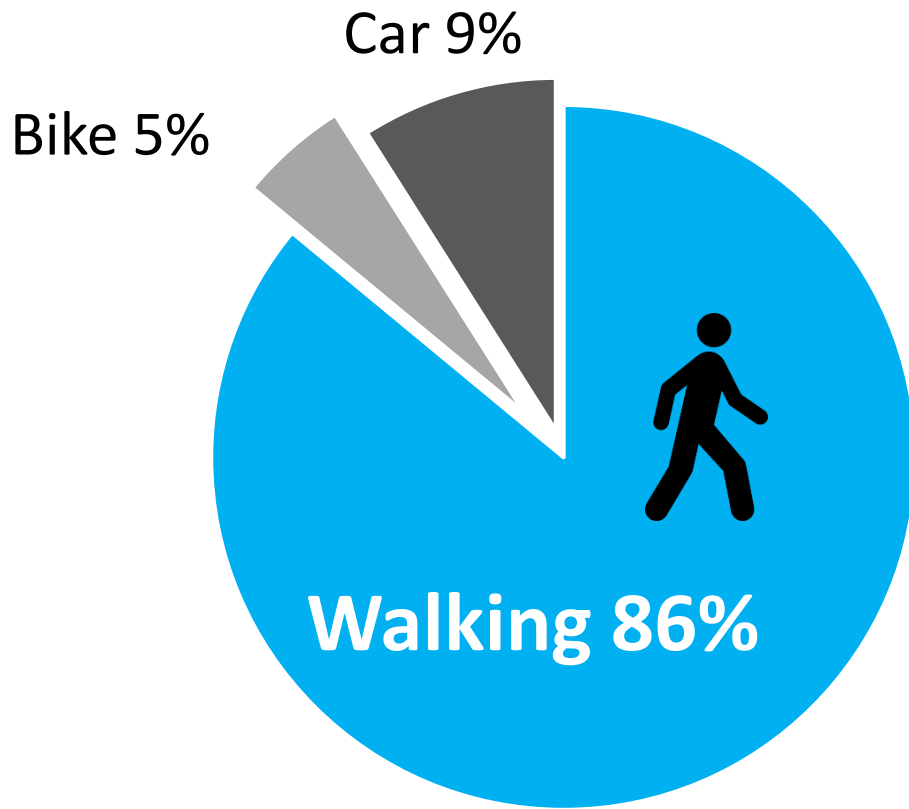
Work



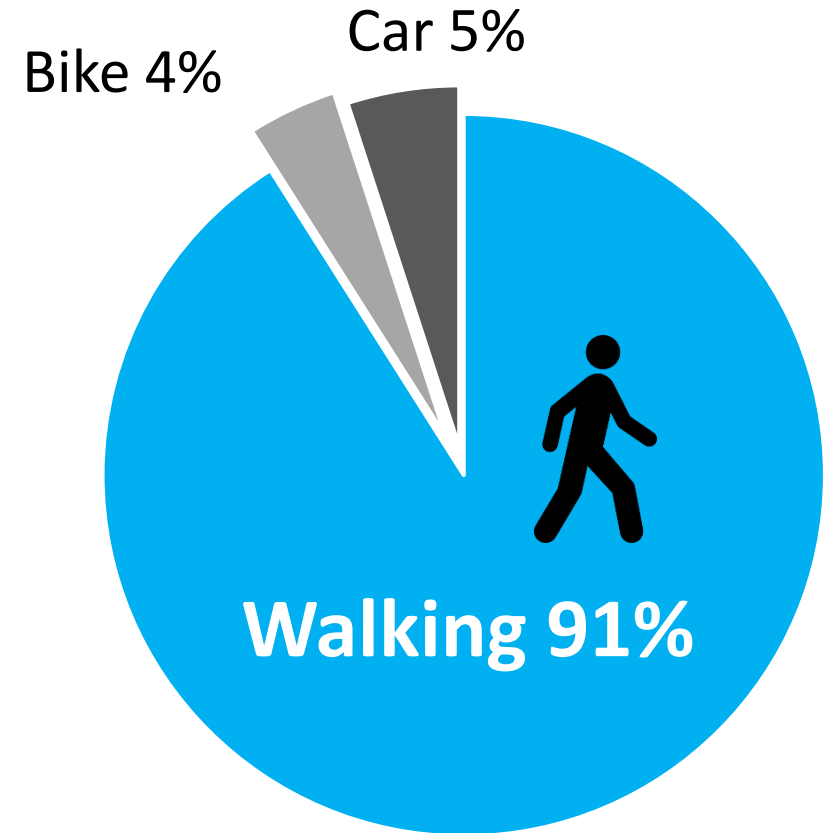
Trip legs

2

How do travellers arrive at stops and stations??



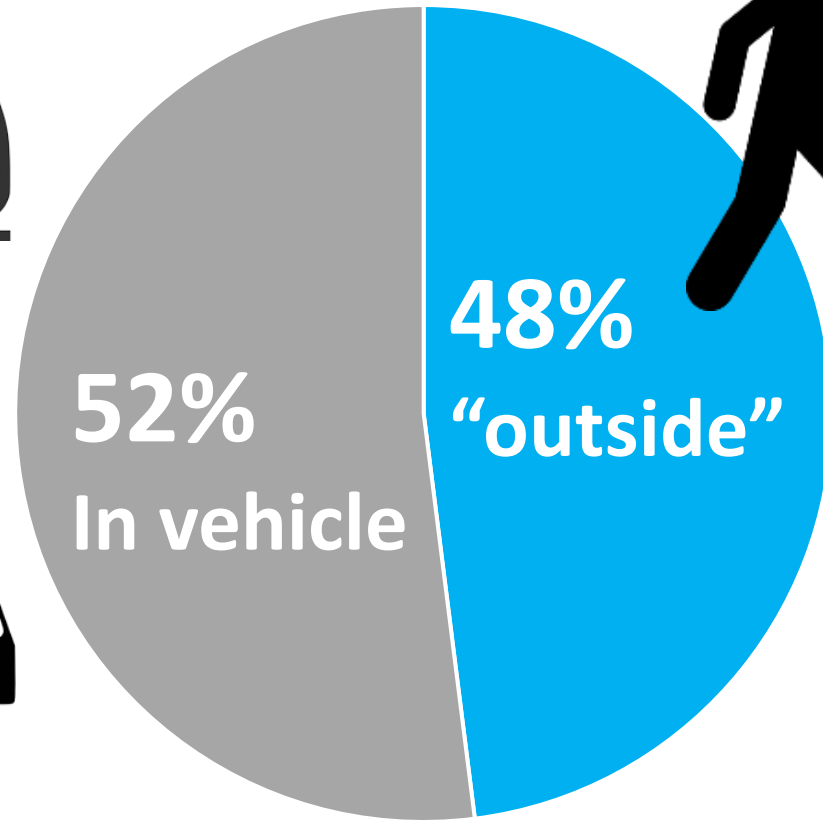
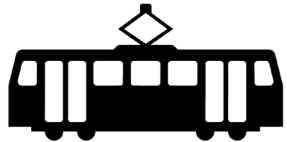
Total



In cities

2

Travel time from door to door:

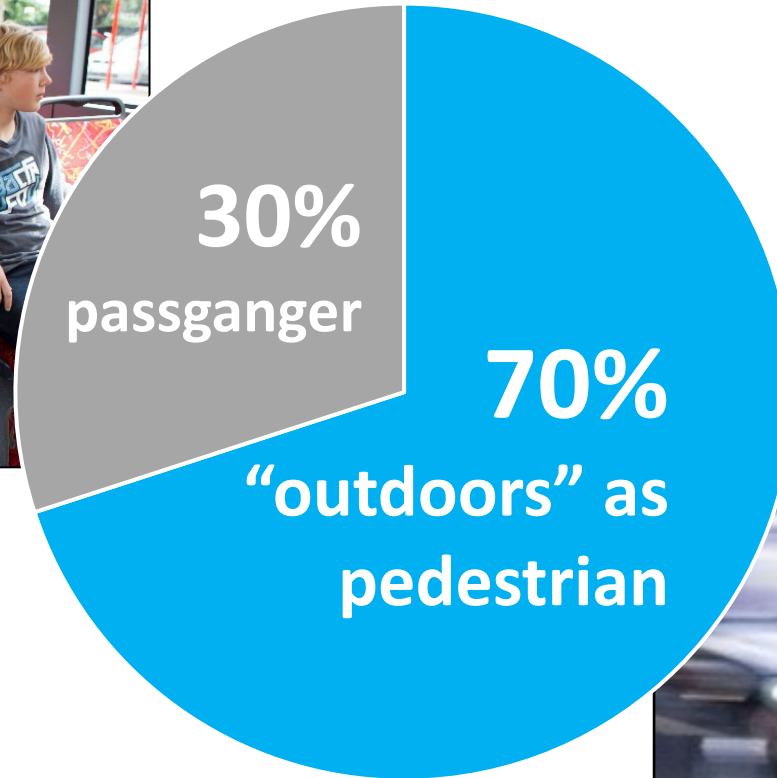


Walking
Cycling
driving

Waiting

Transfer

2 What do you remember from a journey?



2

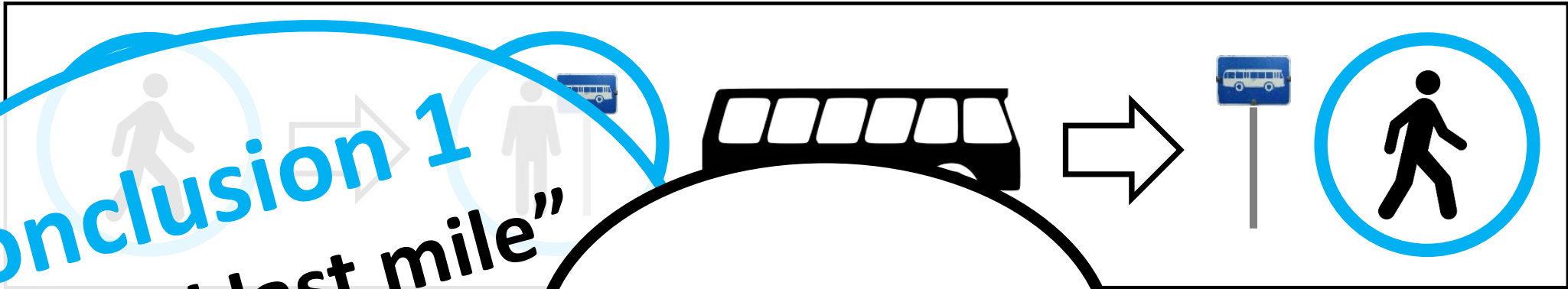
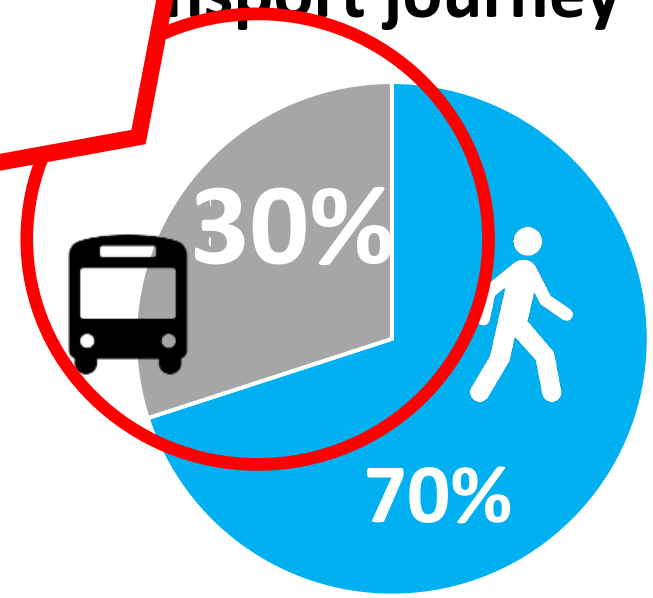
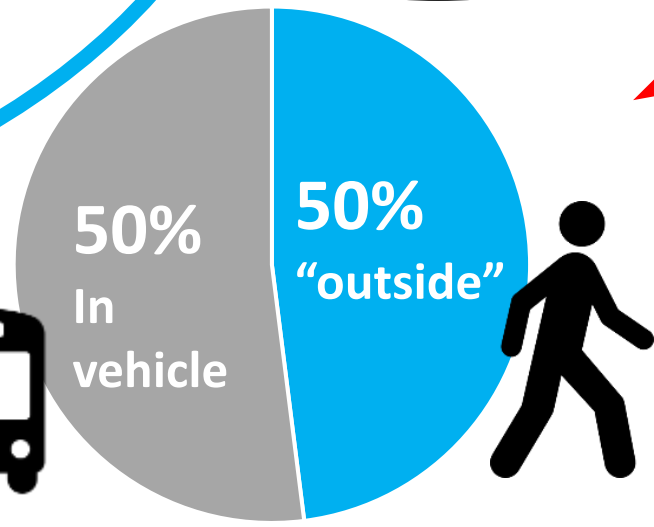
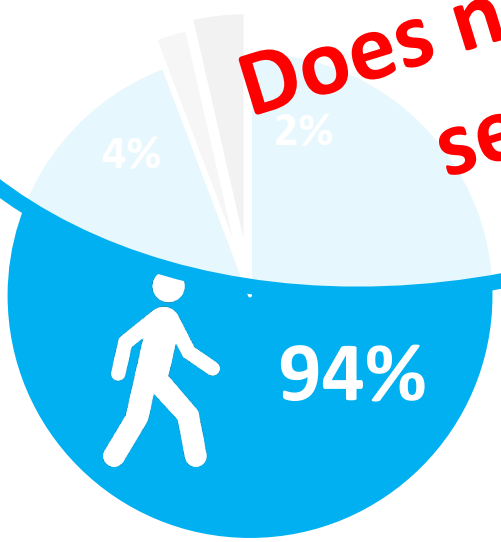
Conclusion 1

“First and last mile” ???

Does not make sense!

PT infrastructure investments

Memory of a public transport journey



3



Good conditions for walking...
potential for public transport



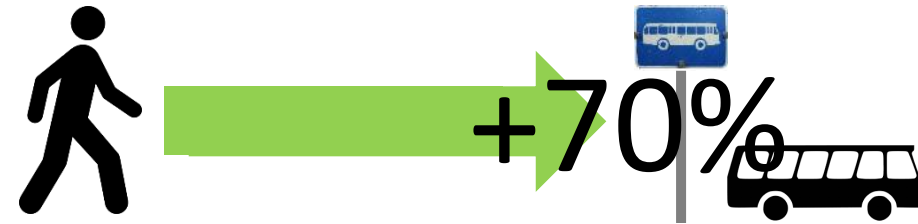
3

Acceptable walking distances vary...



Car dominated

Peperna 1982



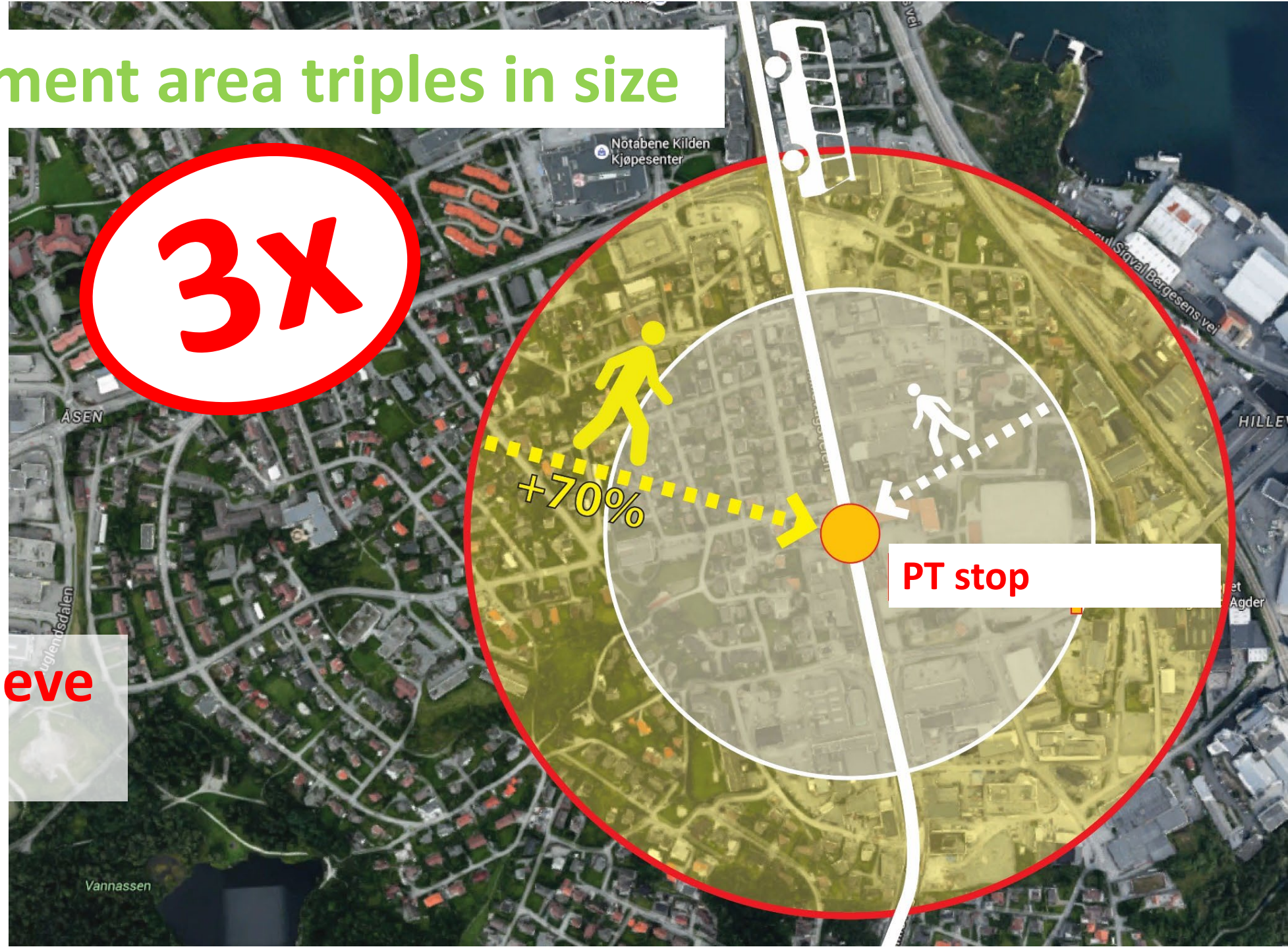
Pedestrian-oriented

3

Catchment area triples in size

Potential

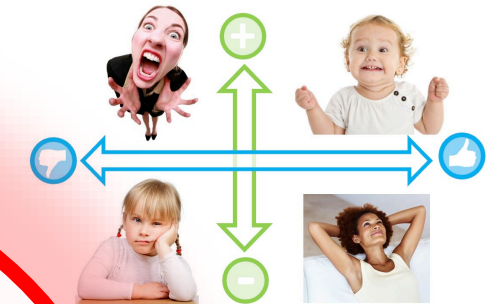
How to achieve this effect?



3 Longer Walks to stops and stations

1

Good emotions and short perceived distances



+30%

2

Urban planning
Urban design



+15 to 25%

3

Transport planning



+20 to 25%

4

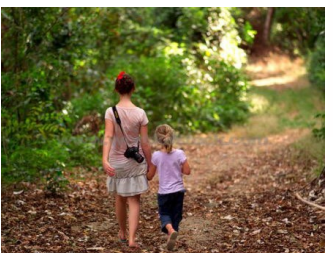
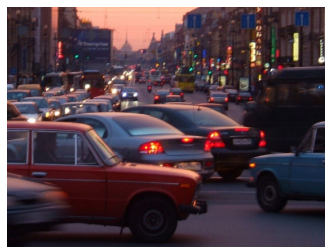
Waiting at street crossings



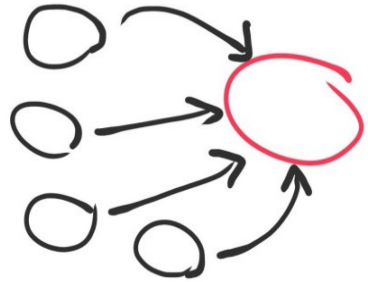
+15%

Conclusion 3
Urban planning
Urban design
Transport planning
Verry doable!!

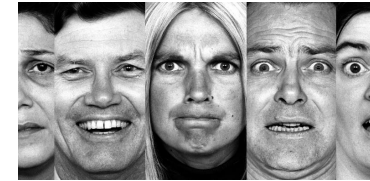
Σ > 70%



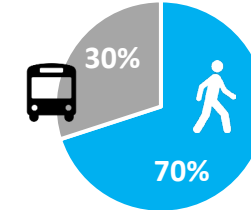
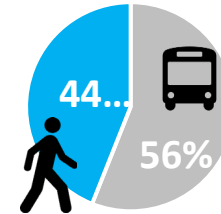
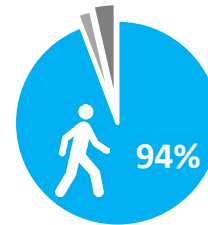
Conclusion



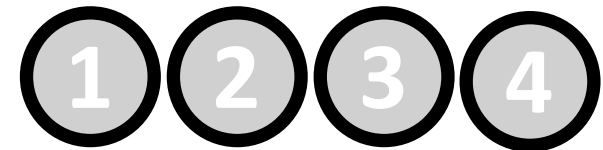
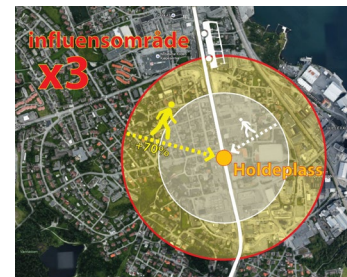
1

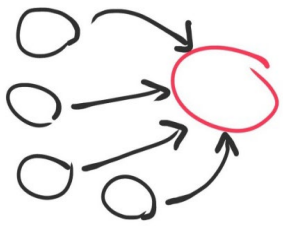


2



3



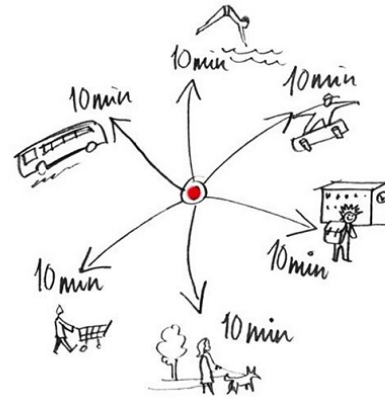


Conclusion

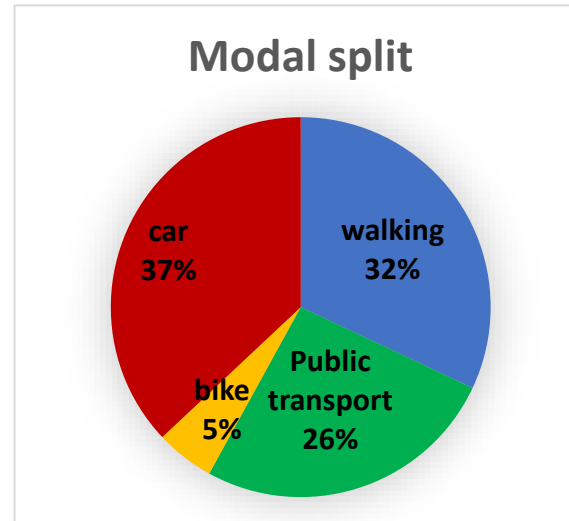
Urban environment: **Not a soft factor**

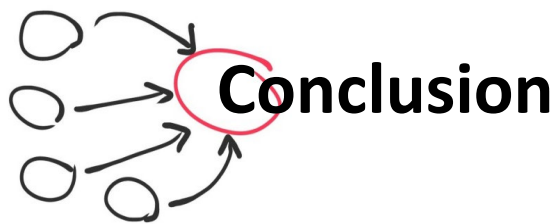


What we reach on foot



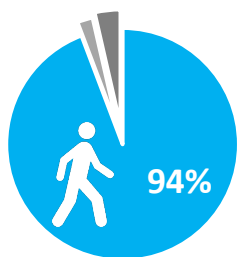
If we walk



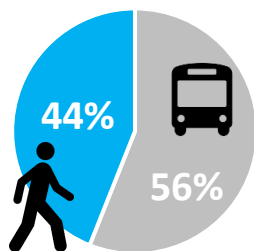


Walking for public transport ... and public transport for walking

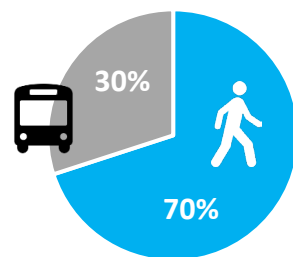
Access



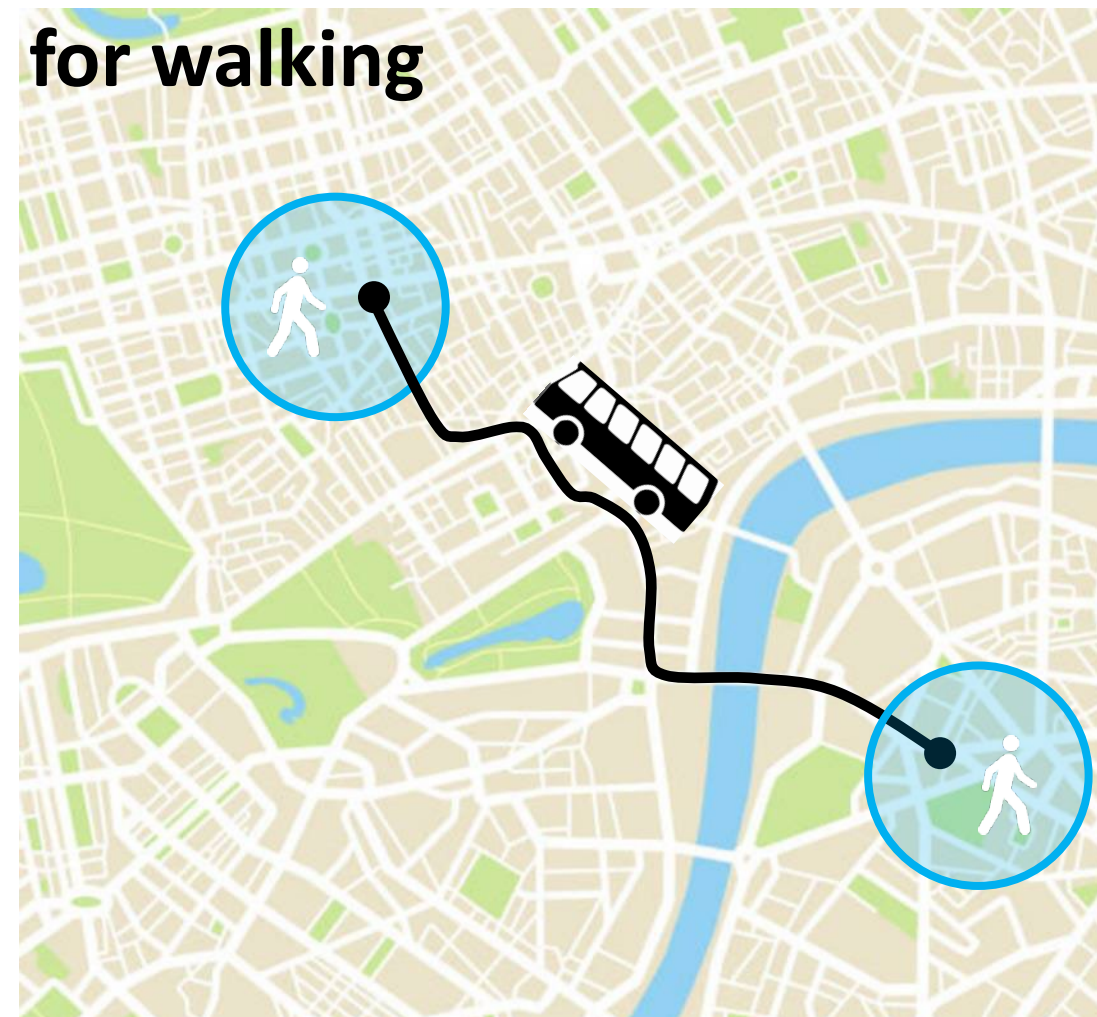
Travel time



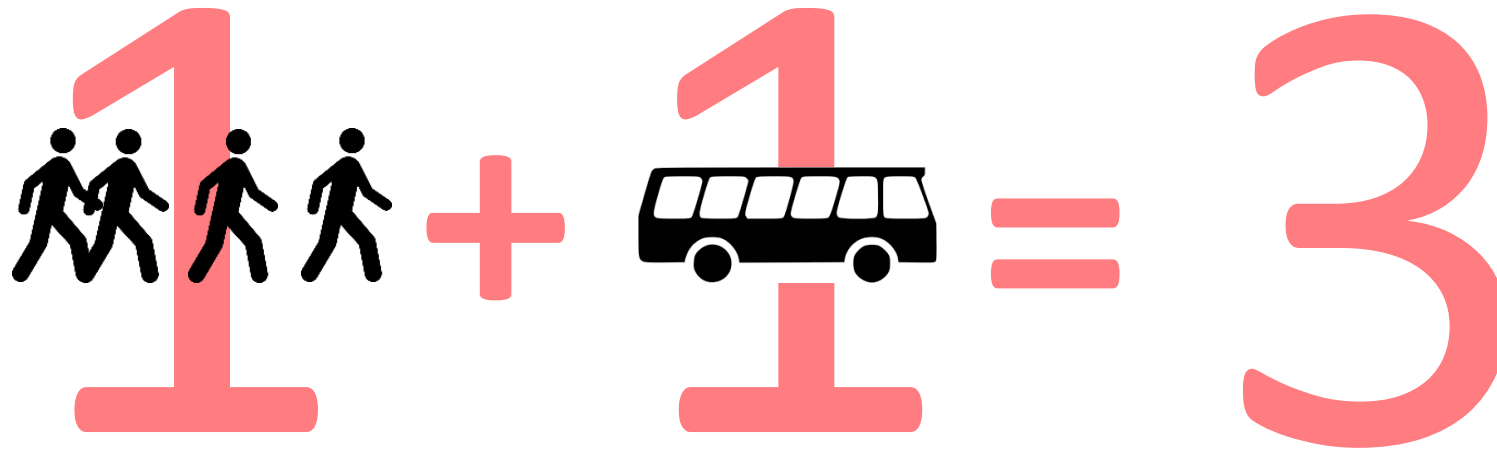
Memory



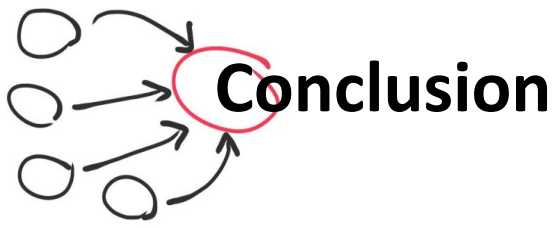
Linking urban quarters for walking



Promoting walking & public transport together: Synergy effect



1. More effective reduce of car driving
2. Higher return from public transport investments!



Walking

Outdoor mobility



Public transport

Outdoor mobility



Cycling

Outdoor mobility



Car

Urban environment critical factor to reduce car driving!

