

## Let's talk about walkability!





### Content

### The CityWalk project

Definition of walkability Urban mobility challenges Negative consequences Benefits of walkability Ingredients of walkability Walkability issues



### The project at a glance





17 partners9 countries



**2.2 M EUR** 



3 years and 4 months



5 work packages



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### What is walkability?







Walkability is the extent to which an urban area enables and encourages the movement of its citizens by walking.

### Walkable cities provide priority to walking over motorised transport







Walkability is the most basic pre-requisite of a sustainable urban transport system

## What makes an urban transport system sustainable?



1. Density and connectivity

2. Access to multiple method of transportation

3. Intelligent transport system

4. Accessible all time, everywhere, by everyone



NOT about creating totally carfree cities

Walkability is...

NOT just about fancy pedestrian infrastructure

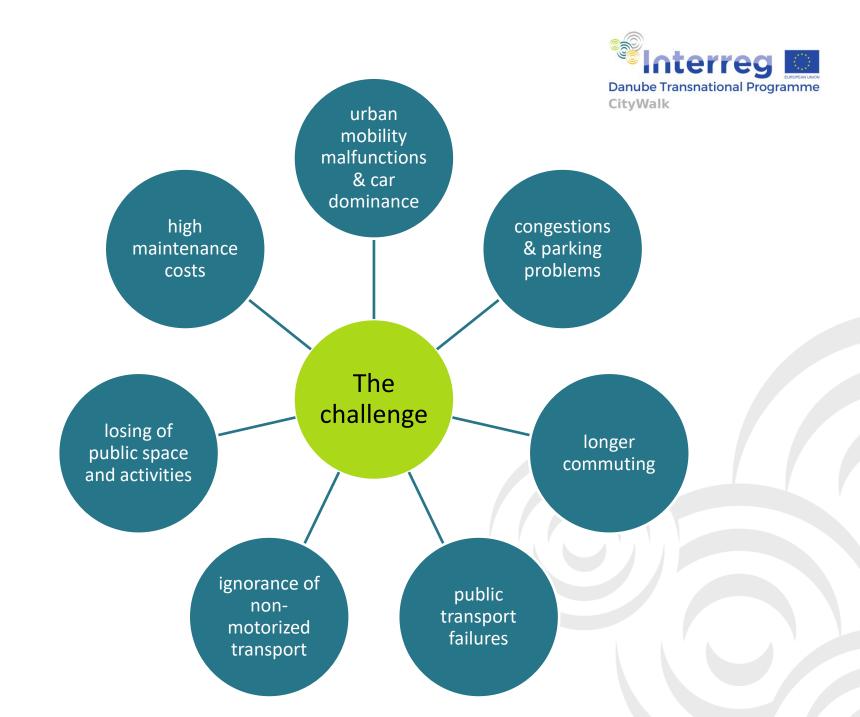
NOT another idealistic concept



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### Urban mobility at a turning point





>50%

### Urban mobility at a turning point

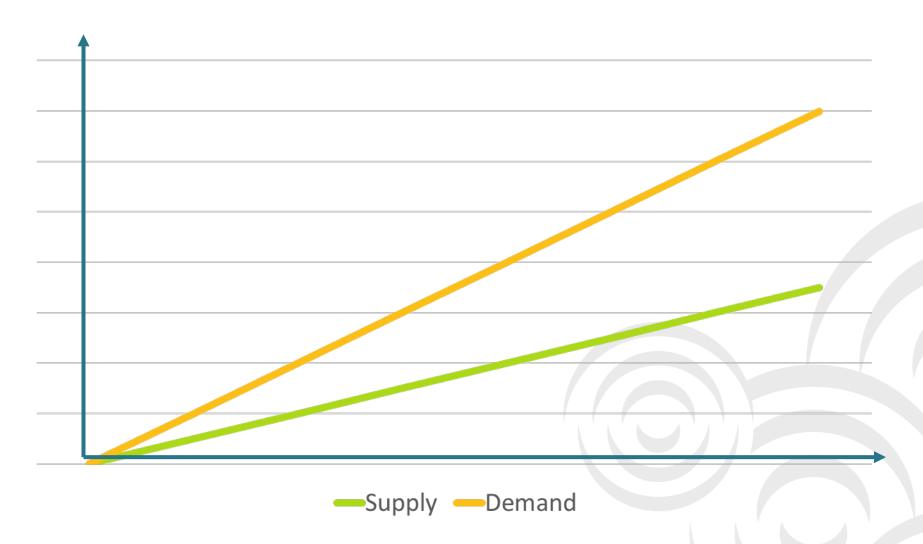




>1 billion people

### What's the problem?







### WHY? Because





Cars

Autonomy (on demand)

Comfort and convenience

Speed

**Status** 

**Pleasure** 



### As a result ...

Congestions & Parking problems







## Congestion & Parking problems

Infrastructure supply vs. demand

**Funding** 

"Roads cause traffic"

No more space!



### Traffic generator

Wasted time & money

Lacks pleasure

23 minutes of commute feels like 19% reduction of income

Reduces free time

### Commute

### Public transport problems







Cars vs. buses





Peak hours vs. offpeak hours





Dense areas vs. suburbs





Who pays for it?



# Ignorning non-motorized transport

Infrastructure ideal for cars

Space for cars vs. space for pedestrians

Limited flow of pedestrian & bicycle traffic

More cars → increased risk of accidents



## Losing space

Cars demand space

Narrowing sidewalks

Disappearing street vendors & street life



## High maintenance cost

Constant need for more and better roads

Delayed maintenance leads to higher future costs

Everybody pays for roads



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# Health Environmental Economic Social







1 hour

+6%







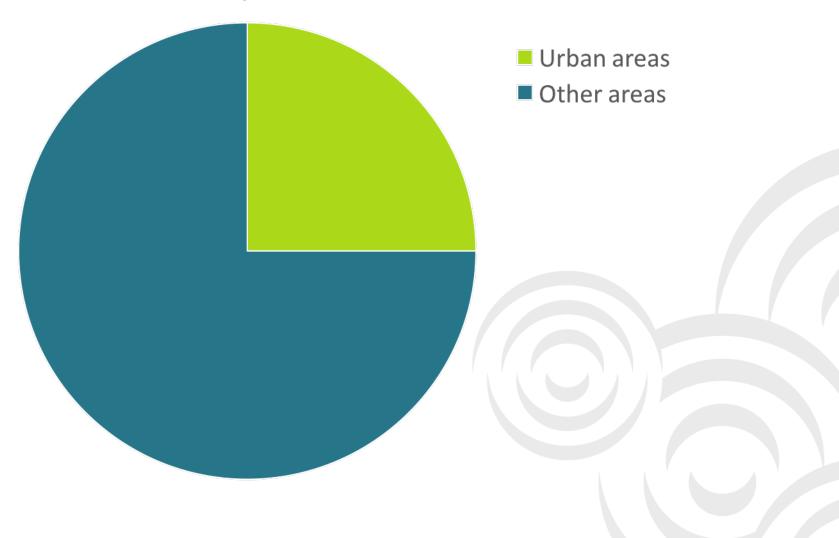
# Health Environmental Economic Social



15%

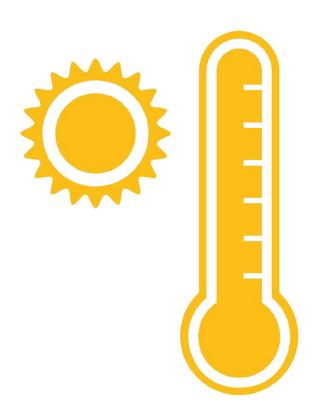


### Total transport emission in the EU





### The UHI effect







# Health Environmental Economic Social





### Economic

Financially more vulnerable household

Detrimental to local economy

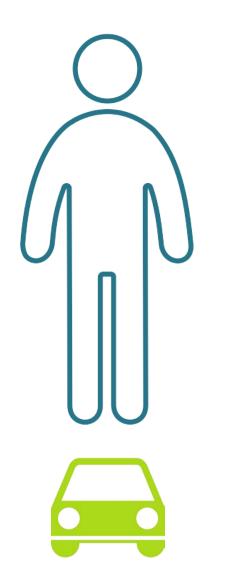
Cost of inactivity-caused illnesses



## Health Environmental Economic

Social









Motor vehicle dependency Inequality

Social participation → lower

Trust → lower

Social cohesion → weaker



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# Health Environmental Economic Social



Fighting obesity

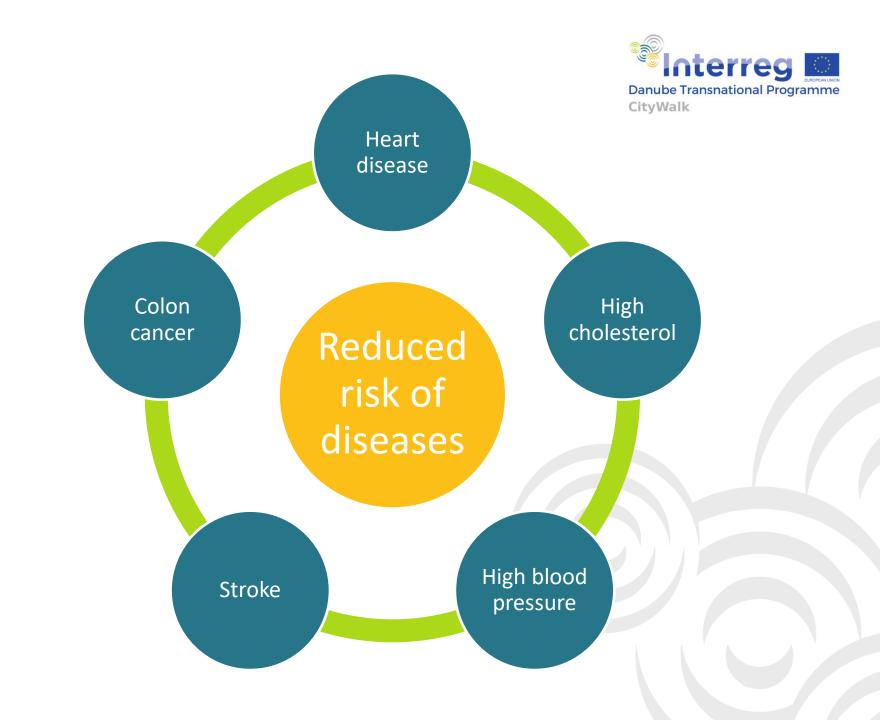
1 km/day

-4.8%

Promoting longevity

Mortality

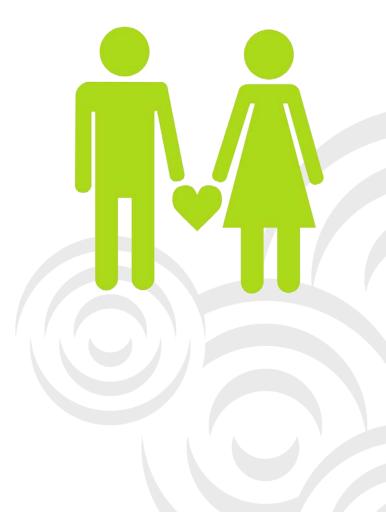
-20%













# Health Environmental Economic Social



### 1 day/week

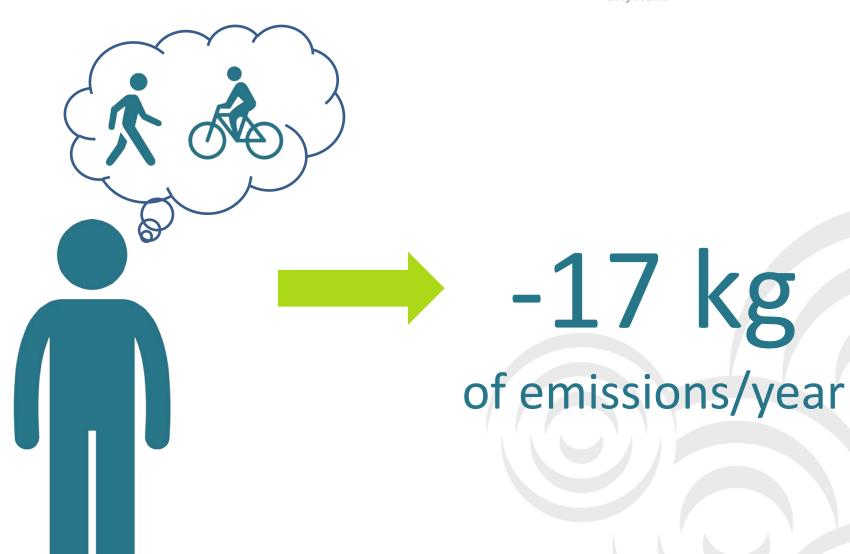
### -3.8M tons/year









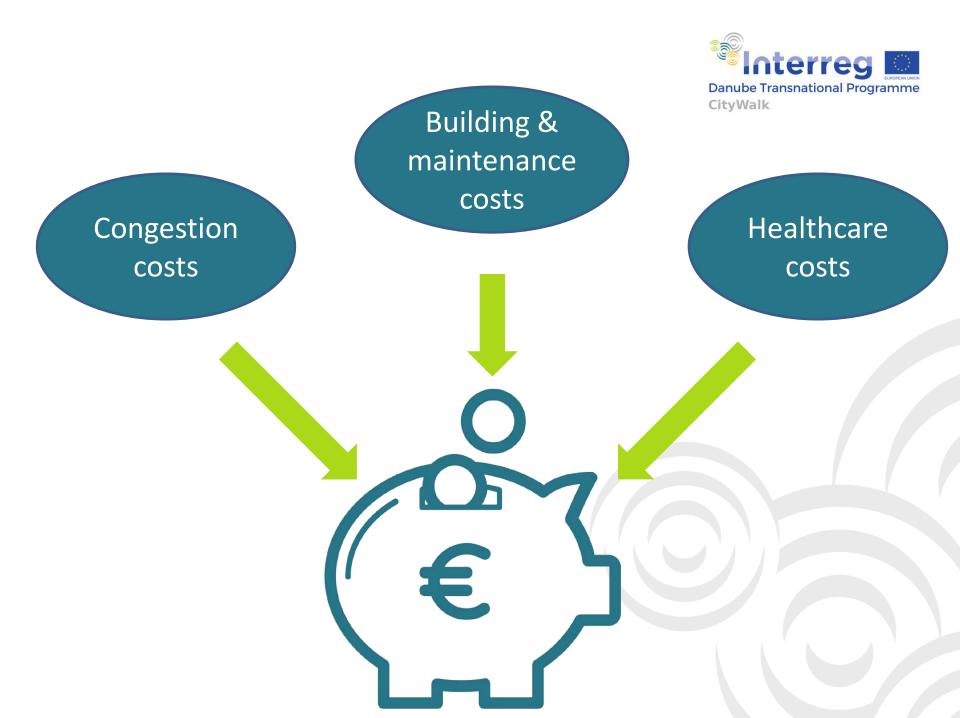




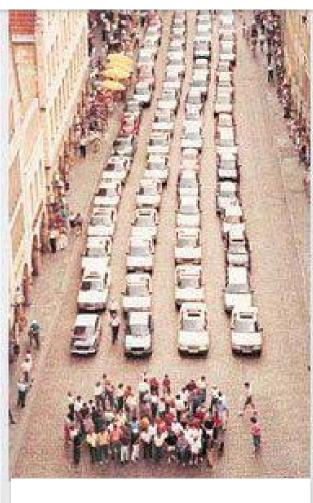




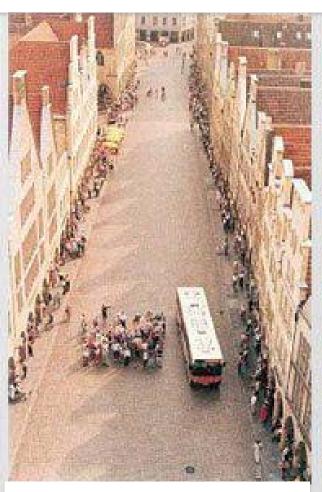
# Health Environmental Economic Social



#### Space needed to move 60 people



Car



Bus



Bike



Walk Score point
=
\$700-3000

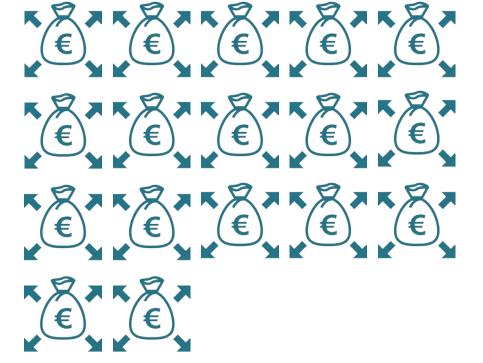






+70% >









## Health Environmental Economic

Social



### Walkable cities

Frequent interactions Stronger neighbourhood More helpful community More resilient community Attachment to place







**Number of cars** 

**Number of friends** 



Social capital

+80%

Knowing neighbours

Sociability

**Trust** 

Political participation



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### Ingredients of walkability







## Safe walking

Traffic safety

Low level of crimes





30 km/h: 5%
60 km/h: 85%



## The more people walk, the safer the street becomes.



## How to reduce crimes

Proper lighting

Police presence

Safety cameras

Windows overlooking the street

Voluntary community organizations

The built environment



### Comfortable walking

Uninterrupted movement

Sitting opportunities

Efficiency

Convenience

Access to "pedestrian accelerators"



## Useful walking

Access to services & functions

Density

Mixed-use areas







## Interesting walking

Street life

The quality of the edge

Green areas

Other people



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#### Key walkability issues





#### Measuring walkability





#### Measuring walkability







<5 minutes

>30 minutes

maximum points

0 points

#### Analysing costs and benefits



Highest

Investment efficiency

Lowest









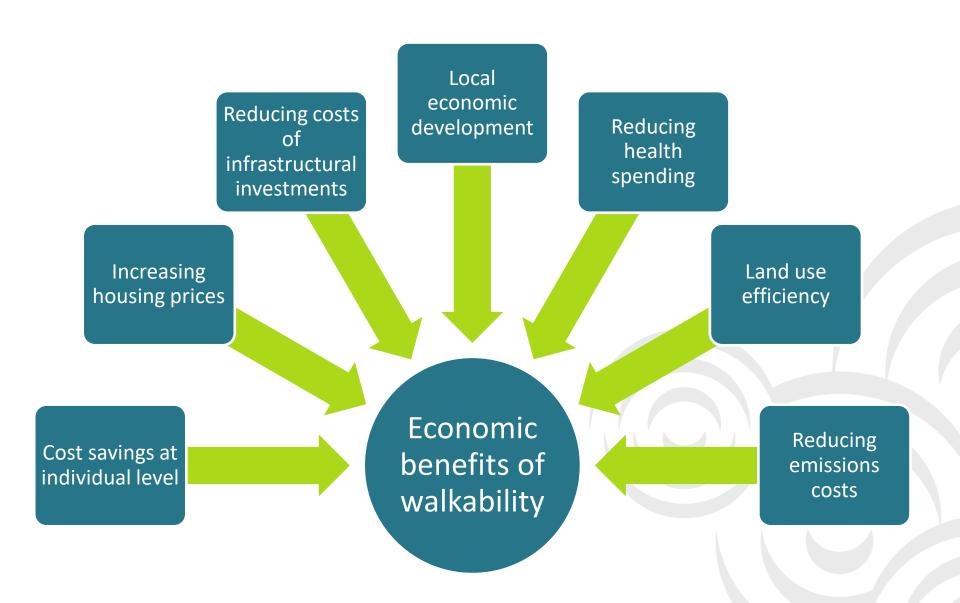
Lowest

Cost

Highest

#### Analysing costs and benefits

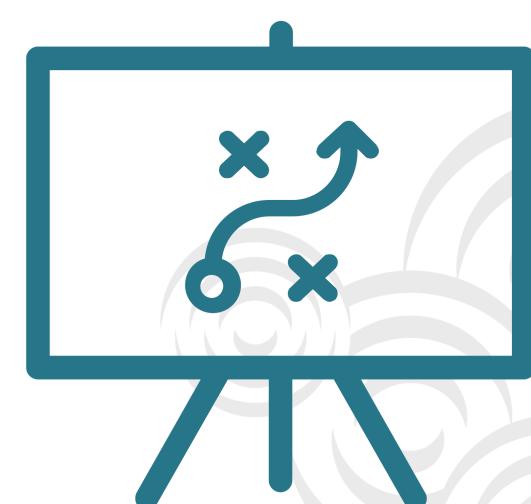




## Walkability planning – integration with other plans



- Traditional local traffic plans
- SUMP
- Permeability plans
- Walkability plans





## Walkability planning

Participative

A detailed analysis

An integrated approach

2-levels: city and community

A diverse set of interventions



## Walkability interventions

Investment in infrastructure

Soft interventions

Policy proposals



## Street design



#### Street design

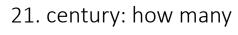


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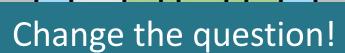


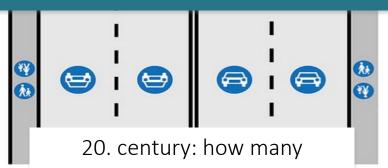


#### **PEOPLE**

94

can we move down the street?





#### CARS

can we move down the street?



#### Street design – principles







# What makes a city bikeable?



Road infrastructure

**Bikeability** 

Soft factors

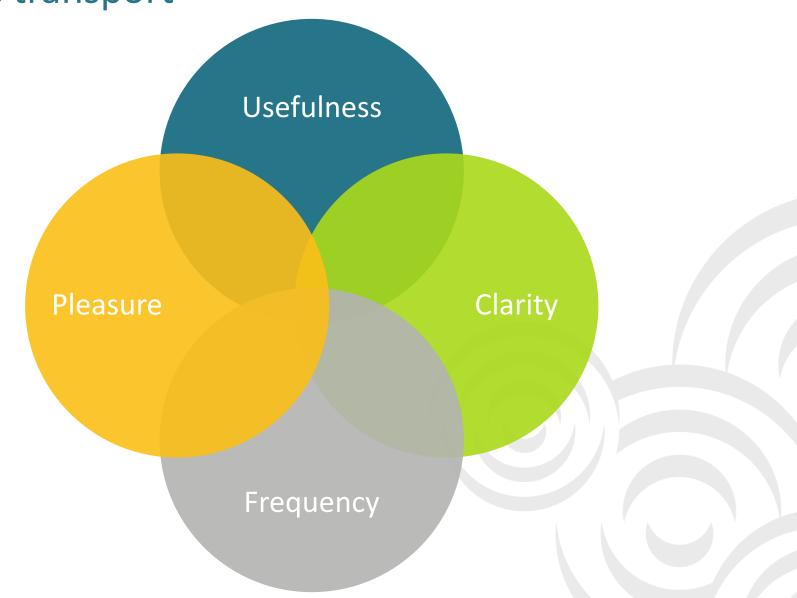
Facilities & services



# What makes a good public transport?

Optimal mix of transport modes – public transport





#### Optimal mix of transport modes – new mobility services





- Taxi

- → E-hailing
- Rental car  $\rightarrow$  Car sharing (fleet operator)



- Carpooling → Shared e-hailing
- Public
- → On-demand private shuttles
  - transport 

    Private buses



- Investment in infrastructure paves the way for walking.
- Soft measures make people walk.

#### To change behaviours







### Raising awareness

Participatory planning

Educational programmes

Campaigns

Leading by example

Gamification



Local regulations

**Parking** 

Speed limits

**Building regulations** 

Road building



### **Economic** motivators

Making car use expensive

Making public transport cheaper

Convenience & time







1.669.430 ERDF



PA)

Project co-funded by the European Union funds (ERDF, IPA)