

# The multimodal ways of commuting that increase one's health. The connection between city's approach to mobility and citizens health

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## About me

Work for the City of Vilnius  
Bike & Pedestrian officer  
Multimodality is in my blood





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CONTEXT



Cities  
are  
complex



# When you look at it



- Every step is part of cities' life
  - Education
  - Culture
  - Healthcare
  - Sport
  - Transport
  - Regulations / Development
  - Green areas
  - Safety...





## Fast forward



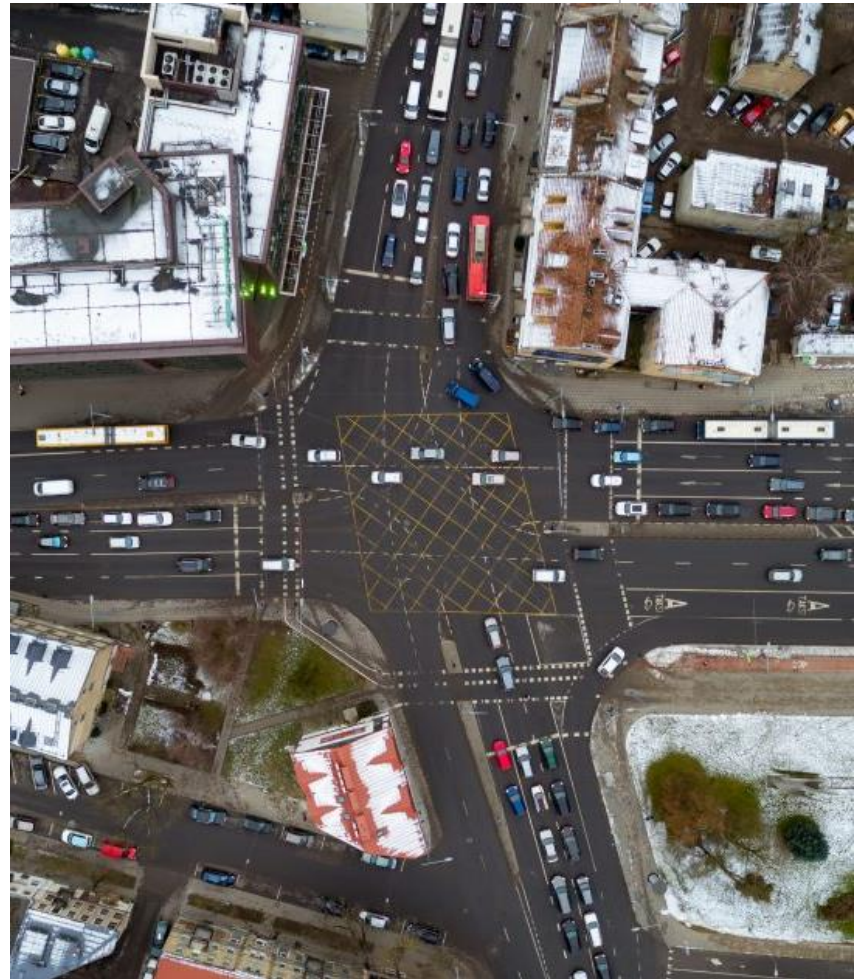
- All of this contributes to:
  - Happiness
  - Lifetime
  - Time



# Challenges all the cities face



- 70% CO2 emissions appear in the cities, 23% (growing) – due to transport
- Today we move how we moved some 100 years ago
- Demographic changes & urbanizations – what's the impact on mobility?
- Mobility, automatisisation, digitalization. Can it help?
- Electrification, AV, sharing, MaaS – is it already here?
- Data and better services
- Electric bikes & scooters can be revolutionary. But do we really need them?





# But are we ready?



- We are in need to control air quality, provide faster travels, change modal split and increase safety
- Changing role of the city in mobility planning: SUMPs, learning from mistakes of the past
  - e.g. parkings are being converted into parks.
- Mobility – not only trips from A to B, but also possibilities to change the city: livable, clean, healthy. Also – make an impact on physical health.
- Challenges or possibilities? Sharing economy, citizen involvement, data
- Is electro mobility the answer? Do we need “green” congestion?





# Can sofa be a killer?

Since year 2012 – more people die from lack of physical activity than smoking



## Differences: 42 cents & 4 kilos



← Each kilometer by bike has its costs both to cyclist and society, however moving by car costs six times more (0,50 Eur) than by bike (0,08 Eur).

Stefan Gössling and his colleagues research (2015) of Copenhagen. Compared bikes and cars and calculated all the costs, e. g. road maintenance, accidents, climate change, health, time, congestions, etc.

Another scientific research says that those who commute by car are on average 4 kilos heavier than those who chose bikes. →





# Cars also kill people

Deaths in  
transport  
accidents  
2016

18

Injured  
2016

682

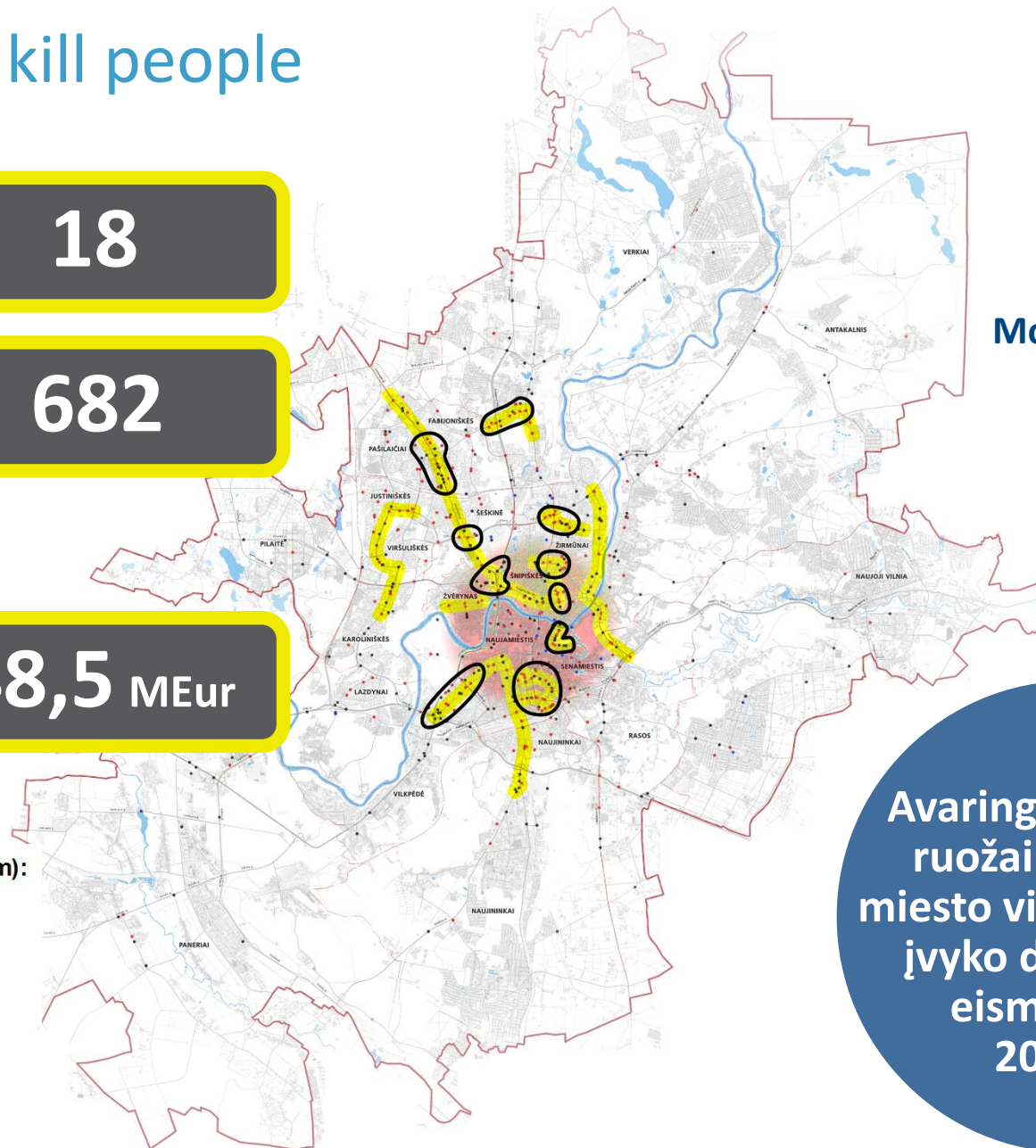
Damage due  
to traffic  
accidents  
2016

48,5 MEur

More cars – more  
accidents

Eismo įvykiai pagal rūšį (2015m):

- Užvažiavimas ant pėsčiojo
- Susidūrimas su dviračiu
- Susidūrimas
- Kiti eismo įvykiai
- Avaringiausi gatvių ruožai 2015 m.
- Lokaliai vietos, kuriose 2015 m. įvyko daugiausiai eismo įvykių



Avaringiausi gatvių  
ruožai ir lokaliai  
miesto vietos, kuriose  
įvyko daugiausiai  
eismo įvykių  
2015 m.

# We lose time



**Total time of a person in congestion**

**136 h**



**More fuel consumption in traffic jams**

**x1,8**





# Impacts on health



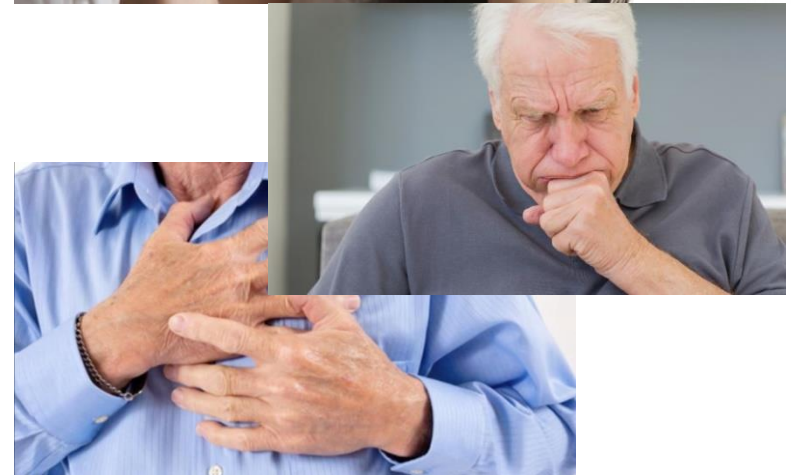
## Noise pollution:

- Physiological impacts;
- Psychological impacts.



## Air pollution:

- Lungs;
- Respiratory diseases
- Immune system disturbance;
- Heart diseases and insults – 80% of them are connected to air pollution.



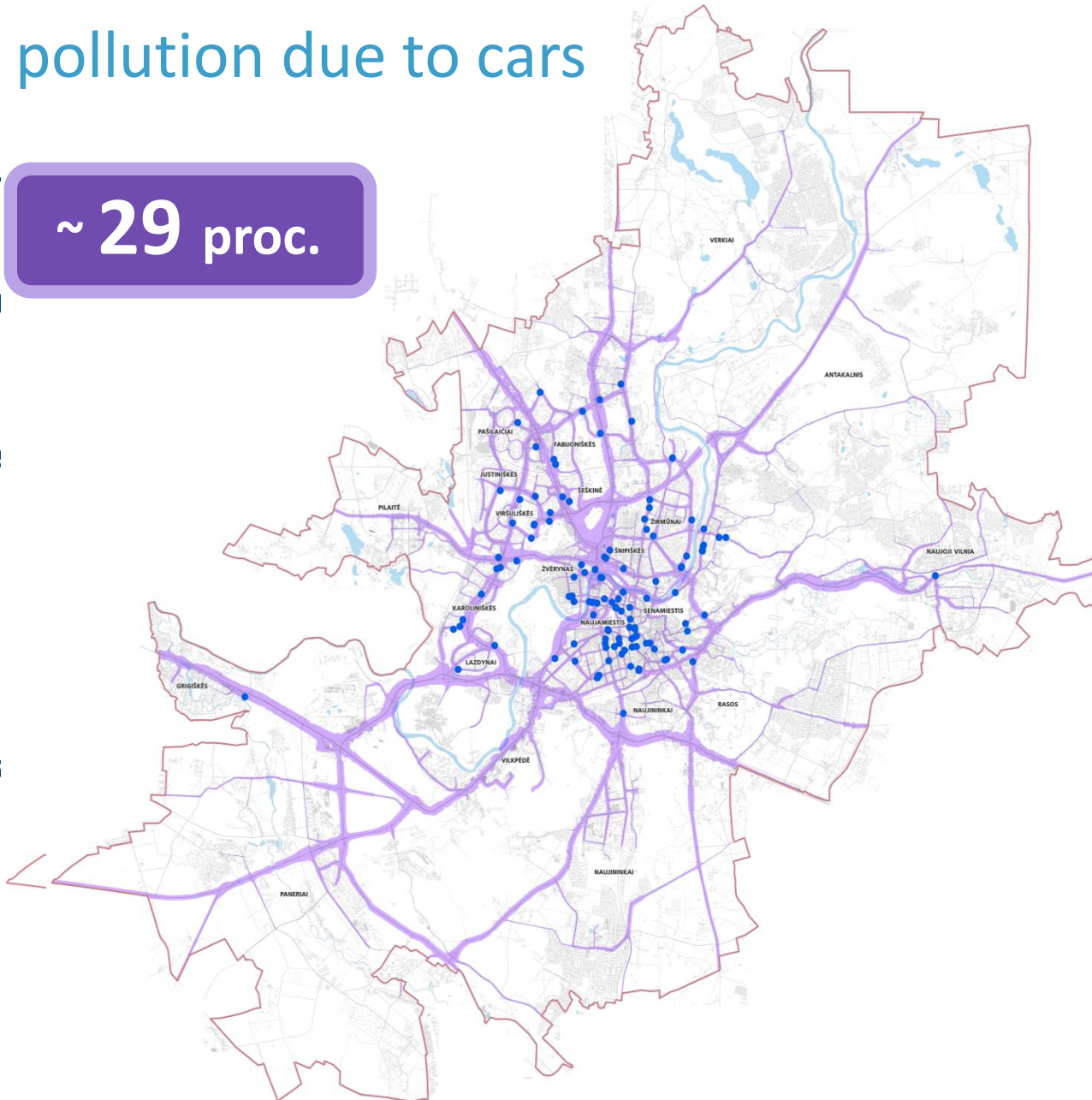
# Noise pollution due to cars

Schools that are in the zone of increased noise pollution

~ 29 proc.

Increased zone of noise pollution

Schools and kinder gardens in the zone of increased noise





# A bit more of a global trends



- What's the difference between Germany and Sweden? In Sweden you can bring your sofa from IKEA by cargo bike. In Germany you might not find a place where to lock your bike.
- Basic infrastructure, especially public transit, for bikes and pedestrians is crucial for the cities.
- Cities still have opportunities to become more livable but only in the way of making possible to MOVE.
- Times flies faster. We do not have 20 years anymore. We need everything today, or at least tomorrow. But infrastructure changes are much much slower.
- We still have to remember that we do not need to control traffic. We need to change the way people move.





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SOLUTIONS



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SOLUTIONS?



We, as a city, can do a lot!





But first...



We have SUMPs. Can they help?

Change the way  
**cities look?**

Change the way  
**cities feel?**

Change the way **we**  
**live?**





# Multimobility and multimodality might be the answer

- The way to experience the city
- The freedom! To choose.
- The way to save space



# But it can work only if the city helps

- ◉ Bus lanes
- ◉ Parking spaces – making it harder to park
- ◉ Road diet
- ◉ Giving more space for people: bicycles, parks, sidewalks
- ◉ Less space for cars = less cars





Cities  
are  
still  
complex





## Some last things has to be quoted

If we're going to talk about transport, I would say that the great city is not the one that has highways, but one where a child on a tricycle or bicycle can go safely everywhere.

Transit does not solve traffic, it solves mobility. You solve traffic problems by restricting car use and restricting parking. Parking is not a human right. Just like when you buy a refrigerator, you don't expect the government to give you a house, you shouldn't expect the government to provide parking for your car.

Urban transport is a political and not a technical issue. The technical aspects are very simple. The difficult decisions relate to who is going to benefit from the models adopted.

**Enrique Penalosa**  
**Former Mayor of Bogota**

THANK YOU.

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