



European Union
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Travel behaviour research and potential user response

Jaroslav Mach

City of Prague, Head of Transport Development Unit

jaroslav.mach@praha.eu

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Travel behaviour

Travel behaviour is a result of the decision processes, related predominantly to the choice of:

- the destination (where we want to get), i.e. the purpose (reason) and the place (location)
- the means of transport (what we want to use for the journey)
- traffic route (which route to take)

Related aspects

- price and duration of the transport
- road chain (means of transport and the route)
- transported cargo
- car ownership, journey duration, weather, ...



Main Data Resources

Travel behaviour survey

- TSK hl. m. Prahy
- Periodical survey (cca every 5 years)
- For city of Prague and surrounding

Travel behaviour analysis (research)

- For Prague's mobility plan
- Analysis of international research
- General rules

Sociological survey

- For Prague's mobility plan
- Survey on public attitudes to different mobility tools

Other data resourcers

Public transport

- number of users
- survey about users satisfaction
- recommendation

Paid parking system

- analysis of changes in parking cars

Motorized traffic intensities on main streets

- automatic maesurement
- Long term information

Bicyclist survey

Main Data Resources

TRAVEL BEHAVIOUR SURVEY

Travel behaviour survey

From 1970's

- Different methodologies, but overlapping

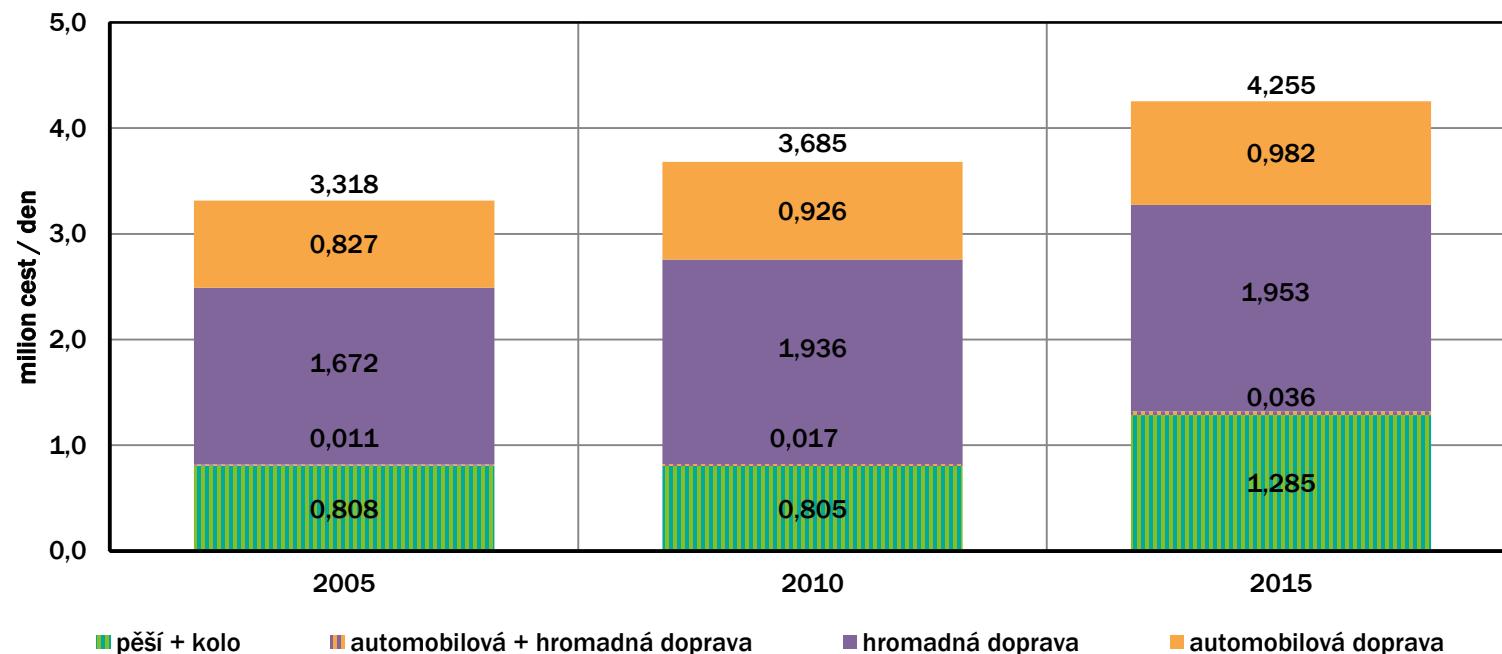
Main information:

- Where from, where to people travel
- Why (jobs, education)
- How many times a day
- What transport mode do they use

Travel behaviour survey

ONLY PRAGUE CITIZENS (2005 - 2015)

Progression of the total number of journeys made by Prague citizens



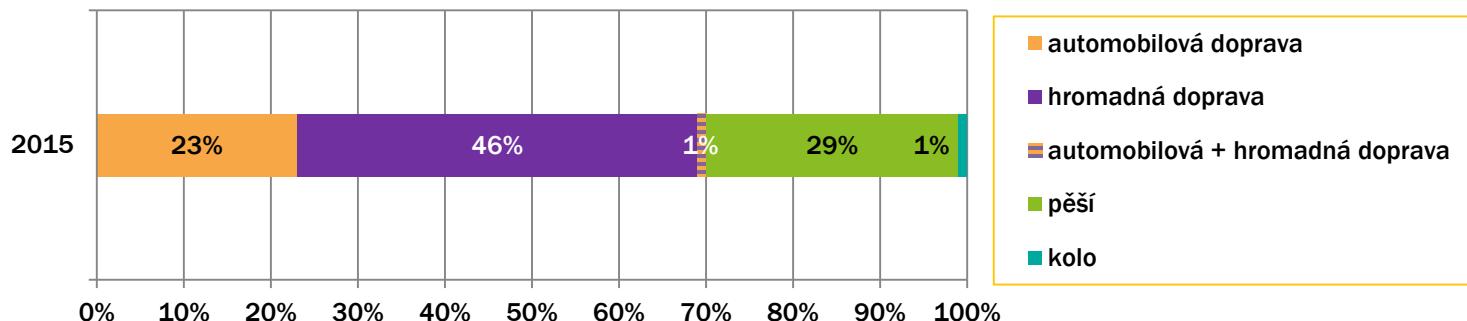
total number of performed journeys per Prague citizen is increasing (year 2015 and the effect of methodology)

number of journeys in mass transit – increased by 17 % over the last 10 years

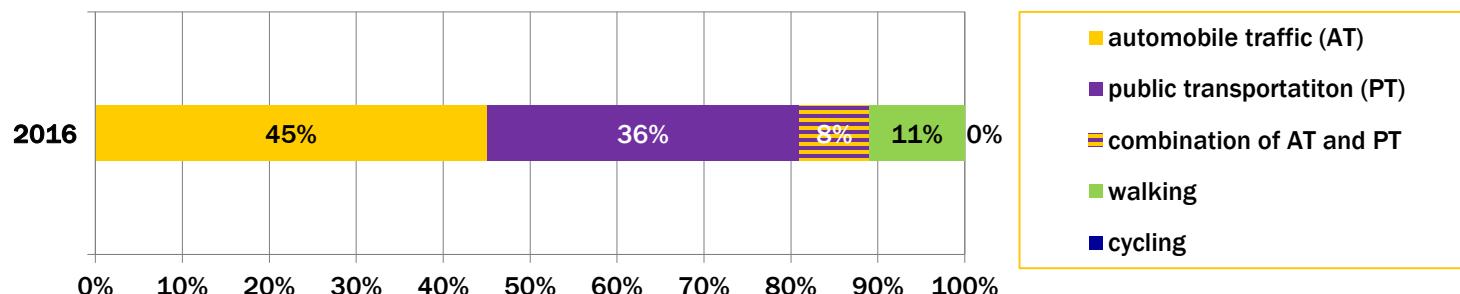
number of journeys by individual automobile traffic - increased by 19 % over the last 10 years

Modal split of Prague citizens and visitors in the territory of the Středočeský kraj region

Prague citizens



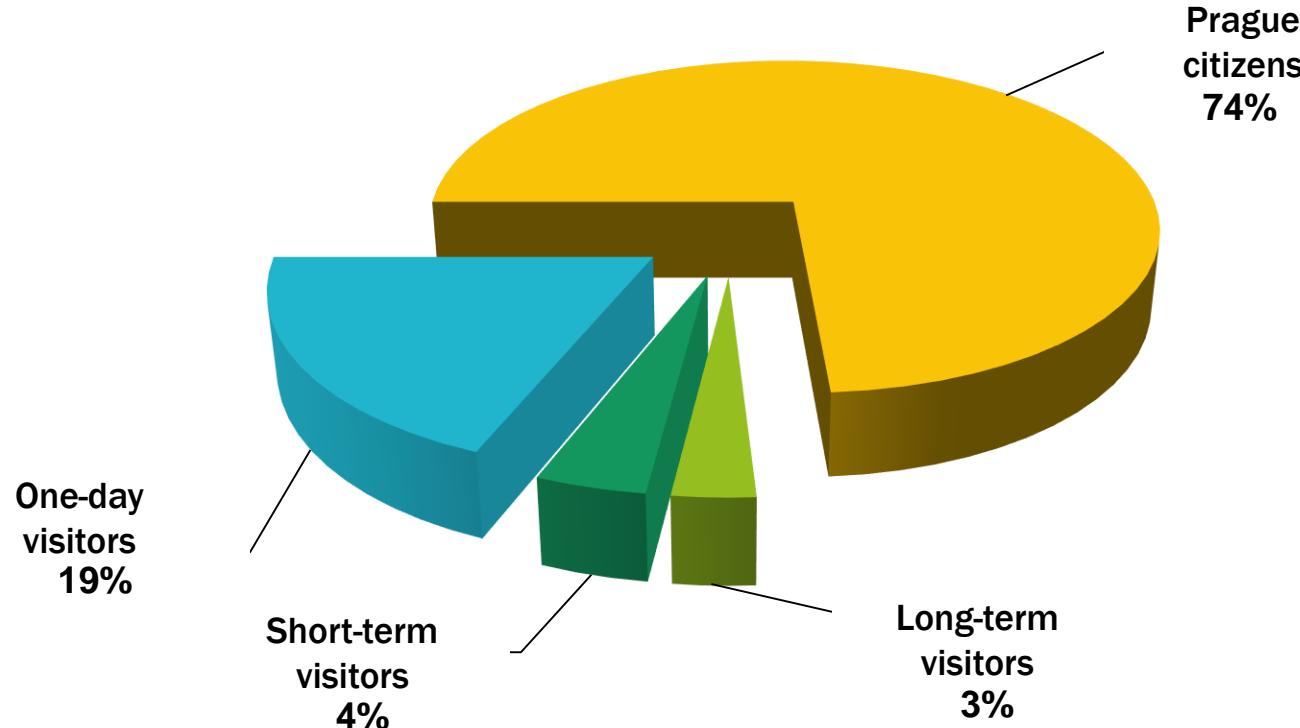
Prague visitors from the Středočeský kraj region citizens (journeys to/from Prague and in Prague)



the modal split has not changed much over the last 10 years in respect of motorized traffic in Prague
proportion of the Prague cycling traffic is around 1 %

Users of the traffic systems in Prague

BALANCE (2007)



total number of persons present on a normal business day in the city in 2007 was estimated to be ca. 1.8 mil., i.e. ca. 50 % more than the number of Prague citizens

each of the groups shows different traffic behaviour

Main Data Resources

TRAVEL BEHAVIOUR ANALYSIS (RESEARCH)

Travel behaviour analysis

Analysis of scientific knowledge on topic

- Charles university in Prague, 2016
- What influence users and how
- General approaches and rules

Main influence

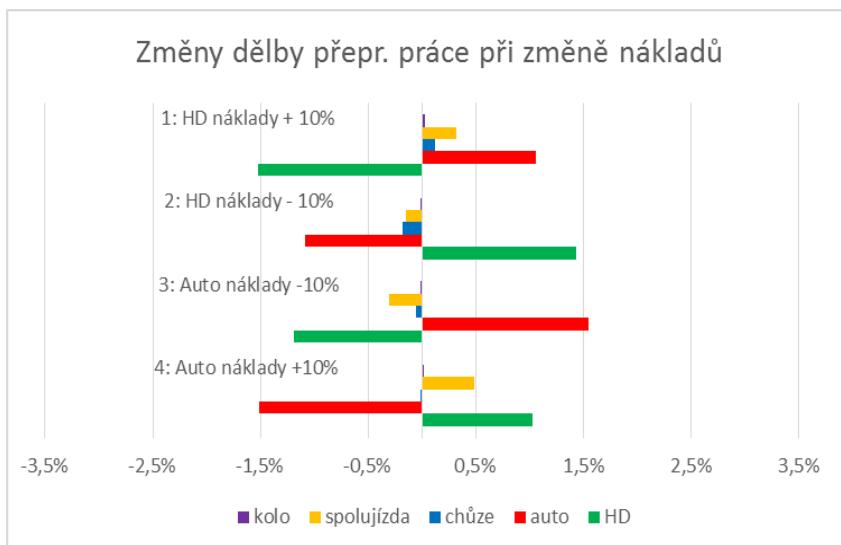
- Time of travel
- Cost of travel
- Individual factors (socio-economic-cultural)

Travel behaviour analysis - summary

- Drivers have a greater resistance to the pricing of specific road sections than others to changes in transport prices, and this regardless of its size.
- Demand persons dependent on public transport (ie. People younger, older, low-income) is less elastic.
- Demand for leisure trips is more elastic than the ways to work.
- Demand for public transport most influenced fare, service quality and prices of parking; Accessibility of public transport leads to its increased use, but may contribute to the spatial expansion of cities.
- It is estimated that soft motivational tools can lead to an overall reduction of traffic by 2-11%.
- From soft motivational tools that can be city, has the greatest potential to reduce individual car transport car-sharing support and personalized travel planning.
- Incentives type of free parking or free access to dedicated lanes increase people's willingness to buy a electric car, their influence, however, is several times smaller than the impact that they have on the decision to purchase an electric potential savings on fuel, other operating costs of the vehicle or lower greenhouse gas emissions.

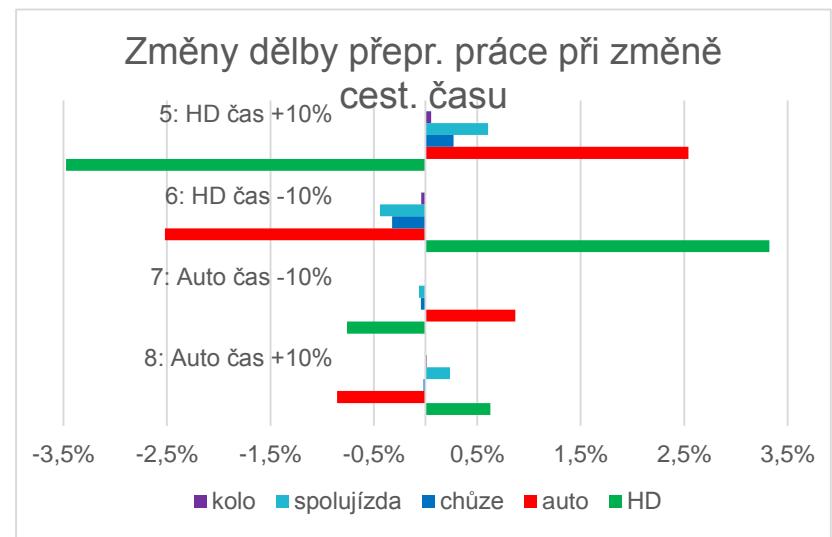
What influence change in modal split

Expected change in modal split according to change of **Cost of travel**



Náklady - cost
HD – public transport
Auto – individual motorized transport

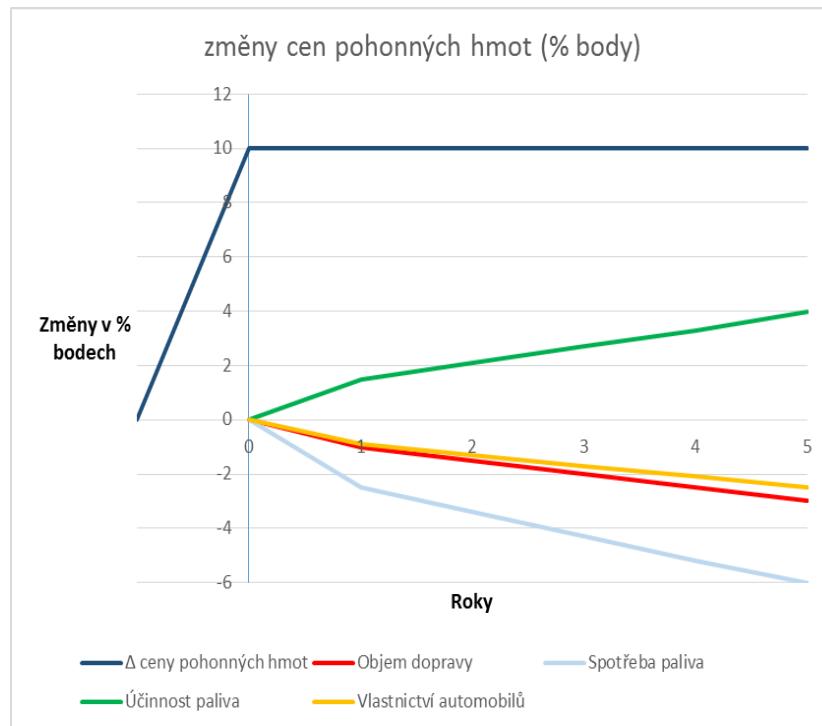
Expected change in modal split according to change of **Travel time**



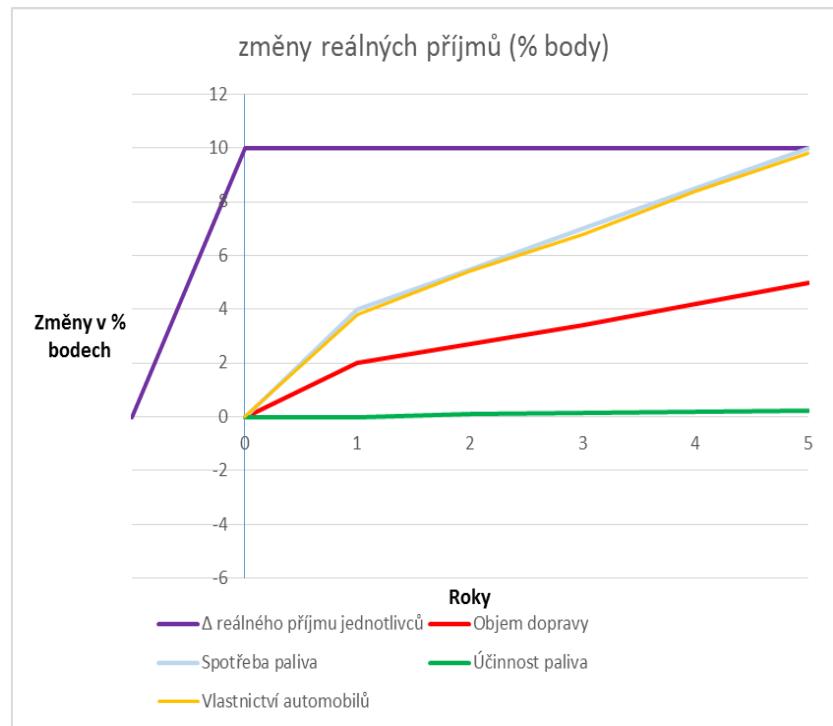
Čas - time
Kolo – bicycle
Chůze – walking
Spolujízda – car pooling

Expected change in travel behaviour

In case of change of fuel costs



In case of change of personal income

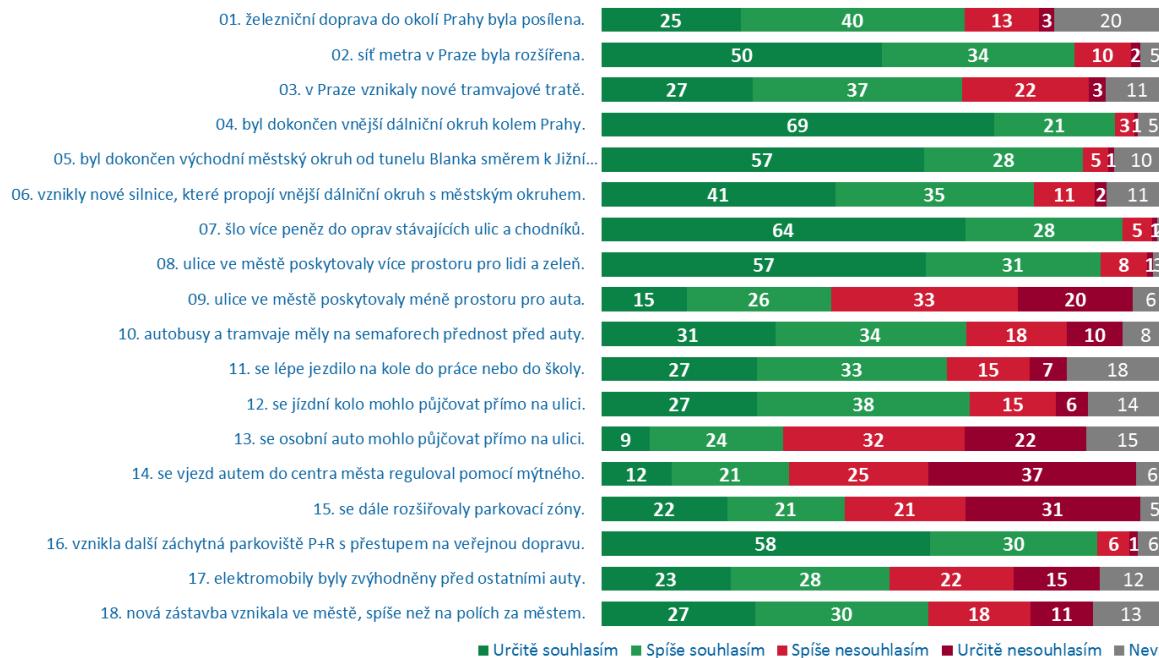


Main Data Resources

SOCIOLOGICAL SURVEY

Sociological survey

- Part of mobility plan preparation
- Opinion of public to different tools or approaches in mobility (18)



Sociological survey

- Different type of users
 - transport mode
 - place of living
 - age
 - reason for travel
- Important to find out what to communicate to who
- Main findings
 - Strong influence of current style of mobility
 - Small knowledge of interconnections of tools
 - Small knowledge of „new“ mobility tools

Typ podpory scénáře podle typu dopravy

Graf zobrazuje podíl podpory scénáře v jednotlivých kategoriích v %.



OTHER DATA RESOURCES

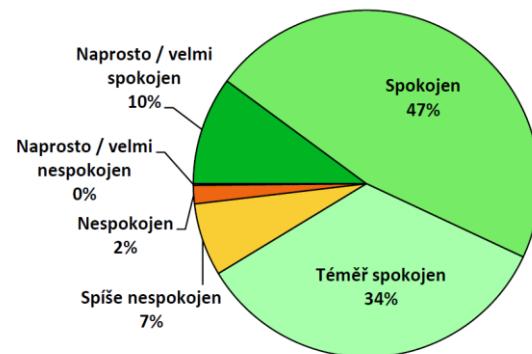
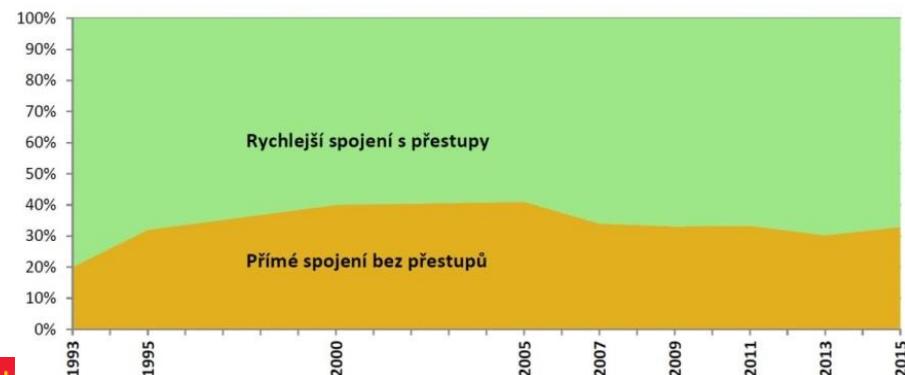
Quality surveys PIT

ONLY PRAGUE CITIZENS (2015)

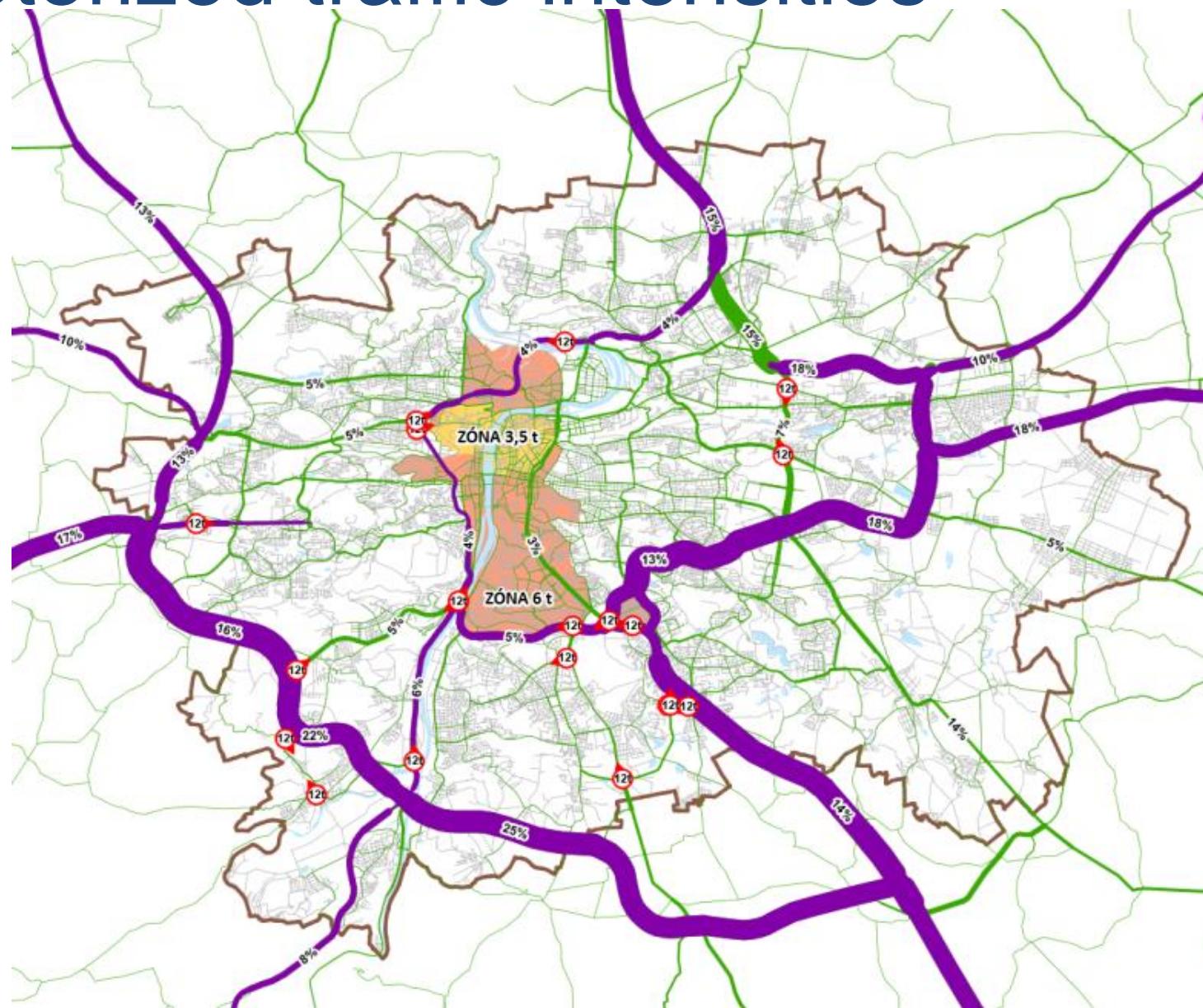
	2009	2011	2013	2015
Average mark (1-6)	2.91	2.64	2.57	2.44
Total contentedness	79 %	87 %	87 %	91 %

Average travelling time (min.)				
2007	2009	2011	2013	2015
39	37	33	35	33

Average number of changes				
2007	2009	2011	2013	2015
1.79	1.46	1.26	1.47	1.31



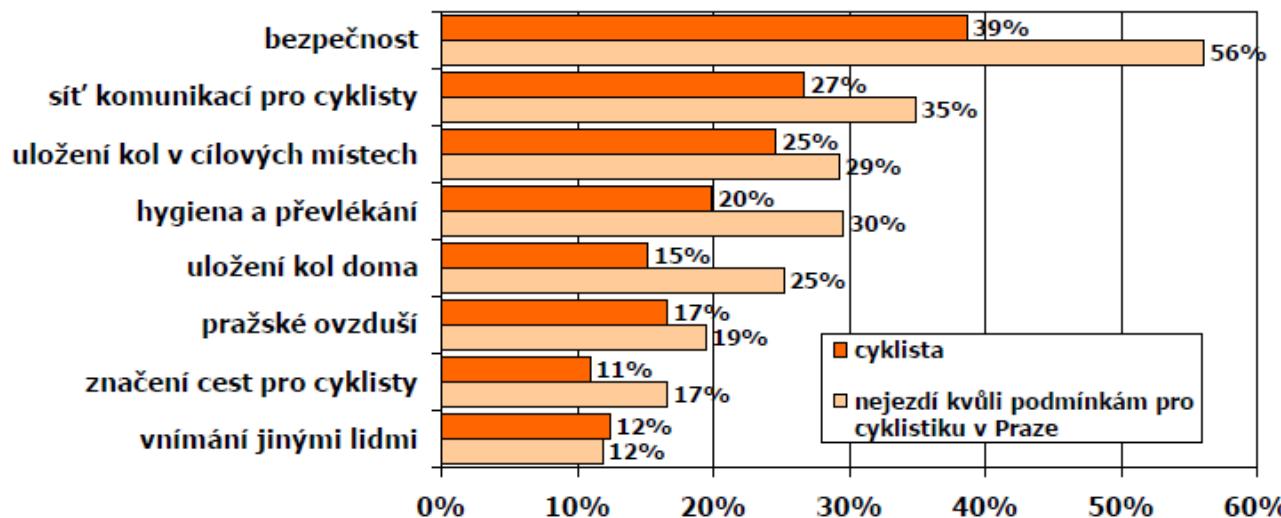
Motorized traffic intensities



Bicyclist survey

Why people do not use their bicycles (more) as a transportation means:

- safety worries when riding*
- worries about their bicycle being stolen*
- better transportation conditions for bicycles in the public transport*
- terrain morphology*
- absence of bike sharing*
- storage for cyclists at their workplace*
- non-systematic (missing systematic connection) of cycling measures*



(GfK
2012)



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Thank you!

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