## PROGRAM



		TWITTER: @WINSPIRE3		
	9:00 - 9:20	Introduction (Petr Pokorny, NTNU)		
	9:20 - 9:40	Green Trondheim (vision, strategy, projects) (Richard Sanders, Miljøpakken)		
	9:40 - 10:30	Presentations from Czech cities & Association of Cycling Cities		
Α	10:30 - 10:40	Coffee break		
	10:40 - 10:50	Urban mobility research at NTNU		
$\mathbf{Y}$ 10:50 – 11:10 Urban mobility research at CVUT				
	11:10 - 11:30	Urban mobility research at UJEP		
1	11:30 - 11:50	Urban mobility research at TØI		
	12:00 - 13:00	Lunch		
	13:00 - 16:00	Excursion		
	18:00-22:00	Social evening		
2	9:00 - 9:15	Summary of day 1, organisation of day 2 (Petr Pokorny, NTNU)		
	9:15 - 9:30	Overview of Czech-Norway grant possibilities (Andrea Nilsen, NTNU)		
	9:30 - 10:10	Group work		
	10:10 - 10:30	Coffee break		
	10:30 - 11:00	Summary of the group work and the whole workshop (Petr Pokorny, NTNU)		

#### 26-28.2.2019, Trondheim



# WINSPIRE

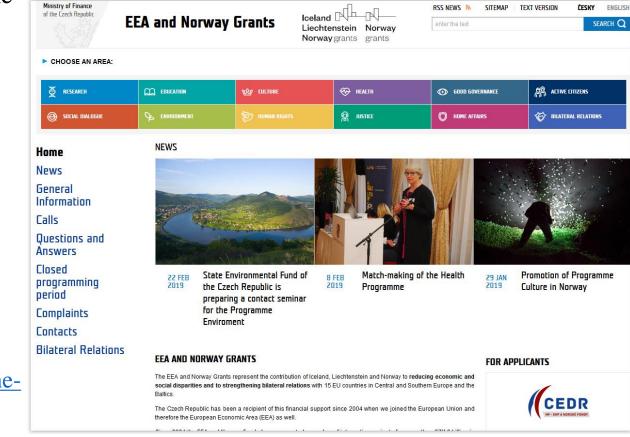
#### **Czech** – Norwegian workshop on sustainable urban mobility





**Norway** grants

- The call was opened 31.8.2018 by Czech Ministry of finance
- The whole budget: 250 000,- EUR
- 17 from 32 proposals were approved
- WINSPIRE is the only one with a transport theme



https://www.eeagrants.cz/cs/vyzvy/2018/ukonceni-1-otevrenevyzvy-fondu-pro-bila-2592



## **Norway** grants

## AIMS

### discussing and identifying the overlaps/fitting pieces in participants' interests, expertise and skills in the field of sustainable urban mobility

### in order to initiate a potential cooperation



## **AIMS - SURVEY**

Norway

grants

- To learn and inspire from others
- Networking
- Future collaboration
- Specifying and designing a project proposal
- How to make the expert knowledge available to the public in a comprehensible form
- How to introduce participation into the agenda of municipality
- How to become a good example for local community
- How to deal with parking policy
- How to changes of traffic behavior of the population
- How to integrate the sustainable plans at municipal level
- E-mobility in Norway
- Handling the rain water

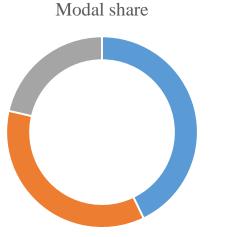
## **SURVEY – 12 respondents**

8 researchers; 7 from a city with population over 100 000

**Travelling to work** 

Experience

- Behaviour, Psychology
- Safety
- Urban freight
- Cycling, Walking, PT
- Urban development (city-neighborhood scale)
- Strategical planning
- Infrastructure design
- Evaluation of measures and policies
- Governance
- Public participation
- E-bike sharing



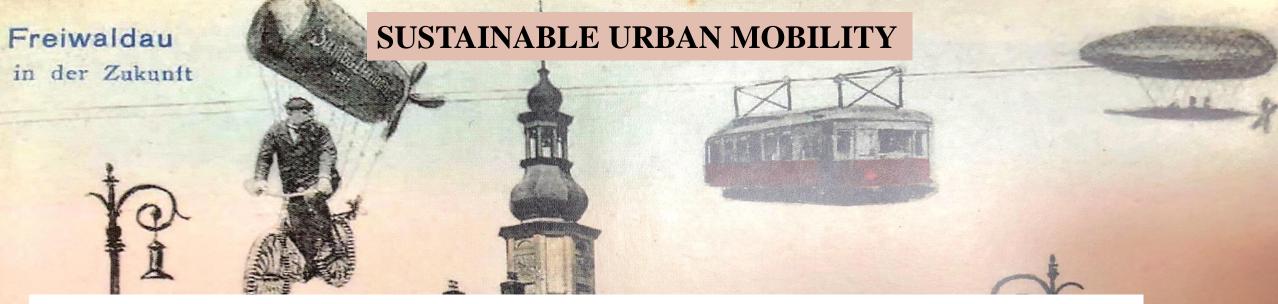
Bike PT Walk Car

#### Most urgent mobility issues

50%	Unsufficient bicycle infrastructure		
33.3%	Lack of budget for sustainable mobility solutions		
33.3%	Lack of public participation in decision making		
25%	Lack of coordination in decision making		

Norway

grants



Urban Mobility = Urban movements (public, individual and freight transportation)

#### **Obligatory**

linked to scheduled activities (home-to-work movements)

#### Voluntary

Free schedule (such as leisure)

### SUSTAINABLE URBAN MOBILITY

**Mobility** is not a goal in itself (it is just a means to take part in relevant activities)

**Sustainable** = the least damageable to the environment and not impairing the mobility needs of future generations

Improving **accessibility**: Increase the number and diversity of activities within an acceptable travel time/costs, so the mobility can be done by walking/cycling/PT

Mobility is also a **social equity issue** - important variations in mobility according to age, income, gender, disabilities





Area: 385 000 km<sup>2</sup> Population: 5 300 000 inhabitants Population density: 14 persons per km<sup>2</sup> (lowest in Europe after Iceland)

Biggest cities (population)

- Oslo 720 000
- Bergen 290 000
- Trondheim 200 000
- Stavanger 140 000

82% percent of total population live in urban areas and cities

- Economy: Oil, Fish
- Energy: Hydroelectric plants
- Transport shaped by low population density, long coastal line
- 94 600 km of roads (664km motorways)
- 49 airports with scheduled flights
- World's largest registered stock of plug-in electric vehicles per capita (in 2017, 42% of new cars registered were electric)



Area: 78 900 km<sup>2</sup> Population: 10 600 000 inhabitants Population density: 134 persons per km<sup>2</sup>

Biggest cities (population)

<ul> <li>Praha</li> </ul>	1 200 000
<ul> <li>Brno</li> </ul>	380 000
<ul> <li>Ostrava</li> </ul>	300 000
<ul> <li>Plzen</li> </ul>	170 000

75% percent of total population live in urban areas and cities

- Highly diverse economy, export oriented (cars and other vehicles)
- Very low unemployment rate (2,4%)
- 55 000 km roads (1232 motorways)
- Densest rail network in the world (9505 km of rail lines)

### Road safety (2017)



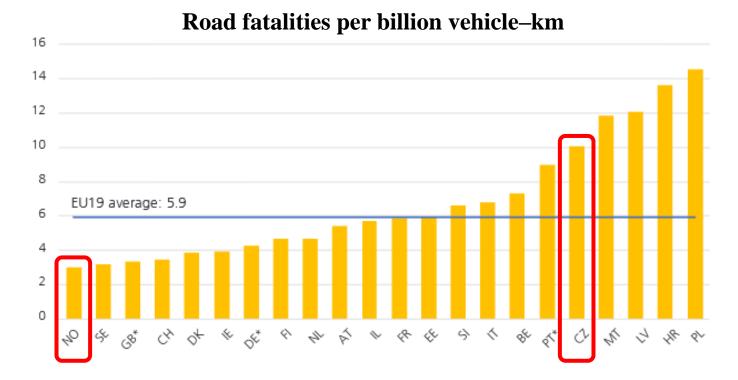
106 fatalities, 665 severely injured

• 20 fatalities per 1 mil. inhabitants (lowest in Europe)



#### 502 fatalities, 2339 severely injured

• 54 fatalities per 1 mil inhabitants

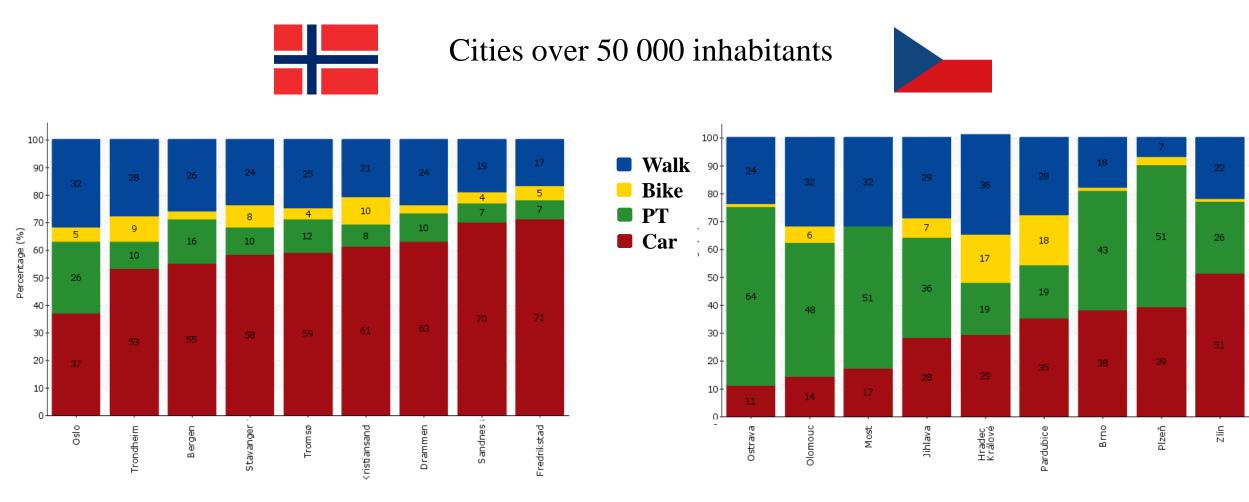


#### **Reasons?**

- traffic characteristics
- safety culture
- driving education
- penalties
- vision zero...

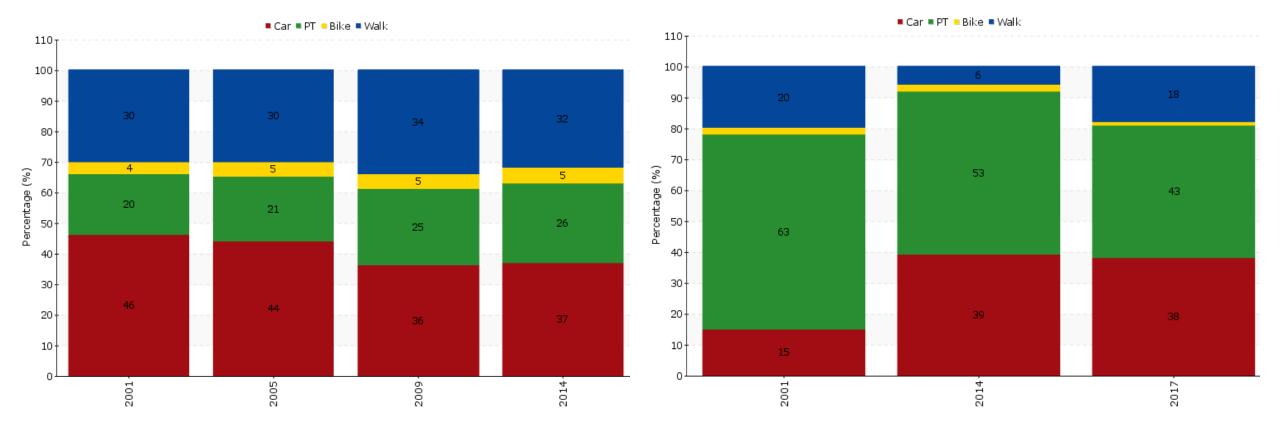
Source: ETSC, 2018

Modal share



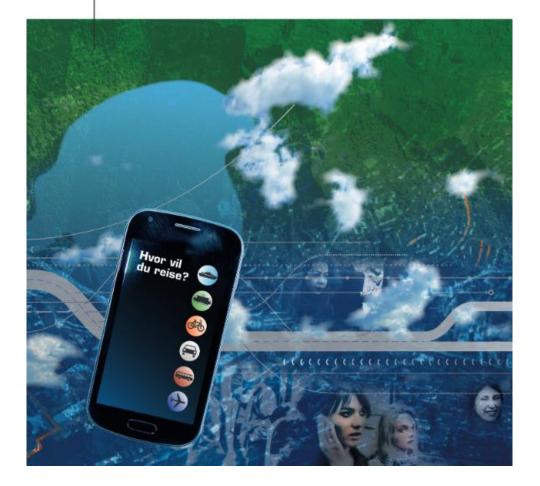
#### Oslo

#### Brno

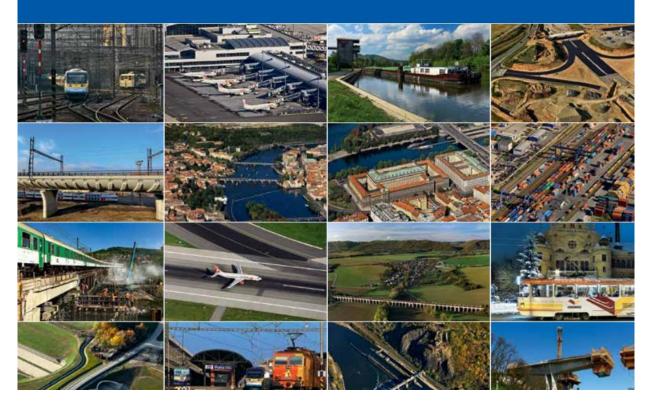


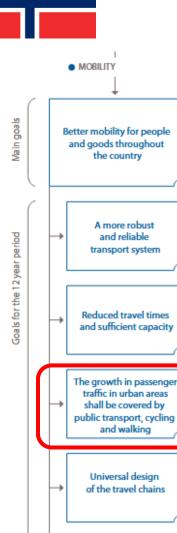
#### **National Transport Plans**

### Meld. St. 33 (2016-2017) Report to the Storting (white paper) National Transport Plan 2018–2029



## The Transport Policy of the Czech Republic for 2014–2020 with the Prospect of 2050





The cost of freight transport shall be reduced, the comparative advantages of each transport mode shall be exploited and more freight transport should shift from road to rail and sea **Overall objective**: "*Transport system that is safe, enhances value creation and contributes to low-carbon society*"

"Central aspects: building and improving the railway network within and around the largest urban areas"

"A significant part of the transport growth can be covered bicycling and walking if suitable conditions are put in place"

"To target efforts to increase the numbers of pedestrians and cyclists"

"In some urban areas, the building of cycle superhighways may be introduced"

"Government intends to allocate 66.4 billion NOK to urban areas to measures for public transport, cycling and walking"

**The main objective:** "to create conditions for the development of high-quality transport system based on the utilization of technical, economic and technological properties of individual transport modes, on the principles of competition, having regard to its economic and social impact and the impact on the environment and public health"

"to improve sustainability and safety of urban mobility"

"channel freight transport by local road traffic measures"

"create a system for protection of city centers from non-essential car traffic, adapt city streets to the needs of pedestrians and city life, develop bike trails and pedestrian zones in cities..."

"develop the current network of non-motorized routes mainly for commuting between home and work or school"

"rethink the current use of sidewalks for cycling, allocating space for bike traffic according to local conditions also at the roadway level" s, traffic and fiedrby places

Sverresborg

## My commuting (home-NTNU)

AVSTEIN

ERA

Havstein/kirkegård

3

Hdelva

Stadium Lerkendal stadion

Strindy

Songer



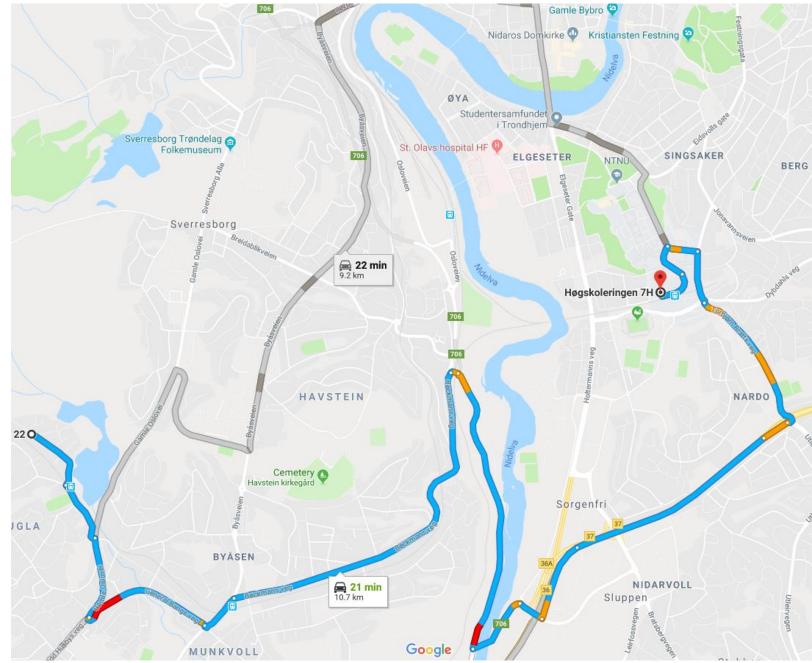
- Toll (ca 30NOK one way)
- Parking fees (5NOK per hour)
- Petrol
- Safety risks



#### Dine kjøretøy

Registrer kjøretøy for å kunne starte parkeringer eller få parkeringer på områder med skiltgjenkjenning automatisk registrert og betalt med valgfritt betalingskort.

UF12780	Rediger >
VW golf	
🚍 Autotrekk skiltgjenkjenning inaktivt	





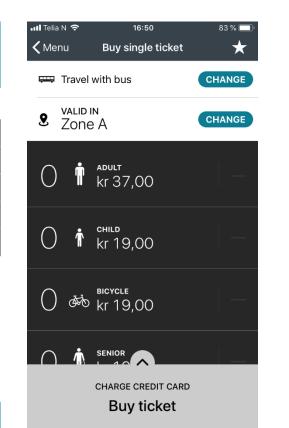
- Ticket (38NOK one way, month card 760NOK)
- Time

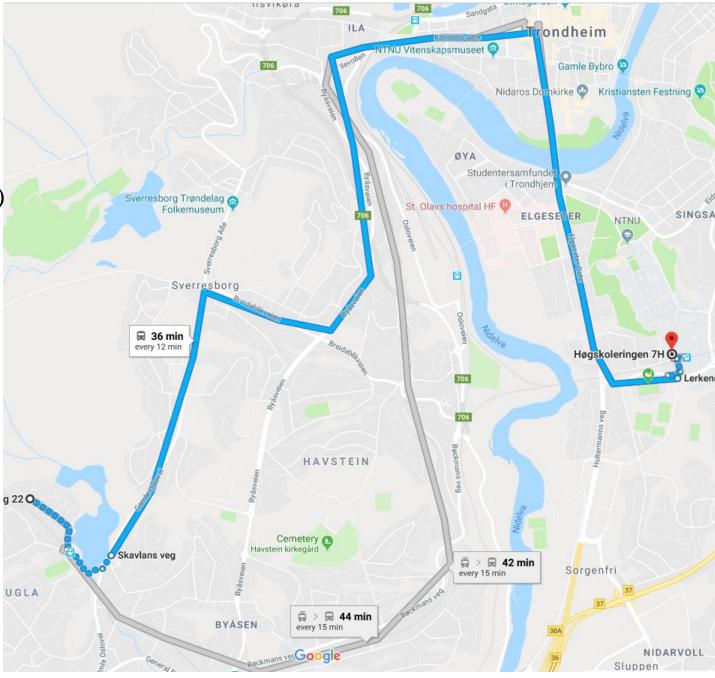
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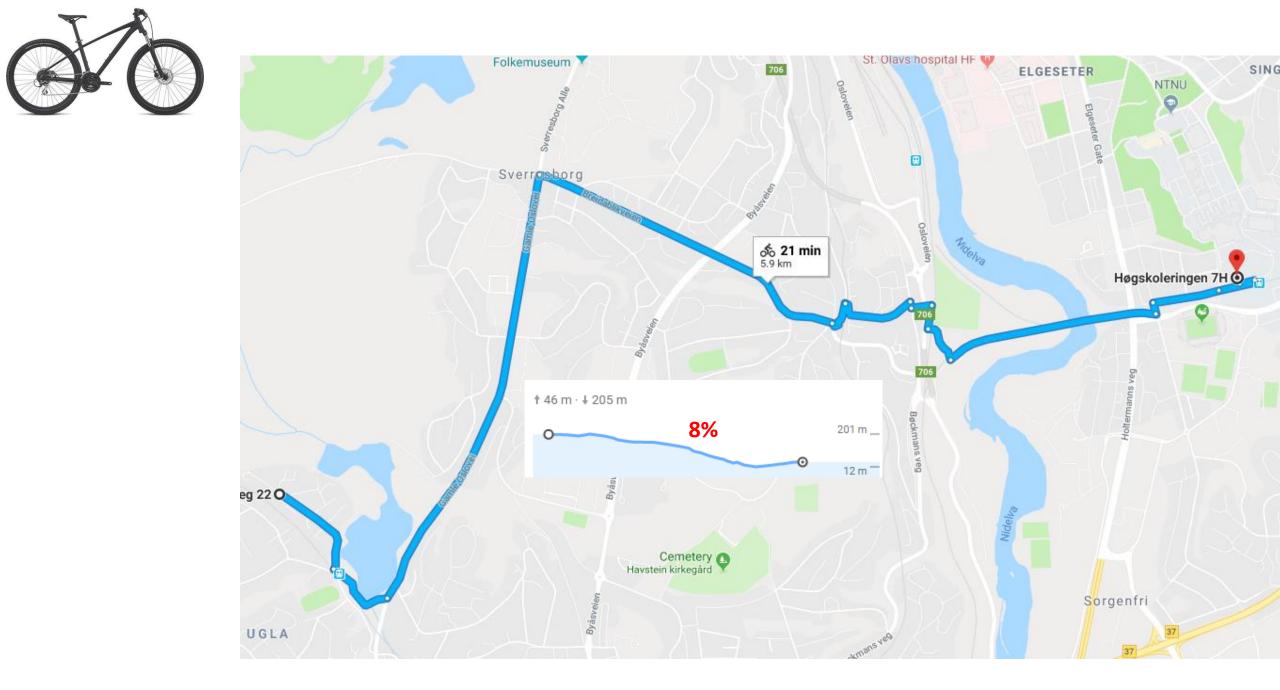
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# tusen takk - thank you - děkuji

## **D**NTNU

Norwegian University of Science and Technology



