

**Workshop «Sustainable urban transport and mobility: Policies and practices on  
the basis of UNECE Environmental Performance Reviews»  
Budva, Montenegro, 18 June 2019**

# How to increase the sustainability of urban transport? The Italian case

Silvia Brini

Italian Institute for Environmental Protection and Research  
ISPRA

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**The Italian Institute for Environmental Protection and Research (ISPRA) is a public research body. It responds to the environmental protection obligations set by the national law,**

**such as control, monitoring, assessment, prevention, inspection, technical and scientific advice, as well as information and communication, education and training. It follows the general guidance received by the Minister for Environment.**

**In 2016 a new law further expanded its area of operation and responsibilities, entrusting ISPRA to coordinate the National System for Environmental Protection (SNPA) composed by local agencies from 10 Italian regions and 2 autonomous provinces (namely, Trento and Bolzano).**

**The National System with a workforce of about 10.000 people over the national territory, ensures a thorough monitoring, to foster the achievement across the whole country of minimum homogeneous levels of environmental protection.**

**ISPRA handles and manages the National Environmental Information System through the collection and elaboration of data and information.**

# KNOWING AND MEASURING: SNPA REPORT ON URBAN SUSTAINABILITY

**120**  
MUNICIPALITIES

**14**  
METROPOLITAN  
AREAS

**31,3%** OF THE  
ITALIAN  
POPULATION  
(ABOUT 19  
MILLIONS OF  
INHABITANTS)

**7%** OF THE  
ITALIAN SURFACE



## Qualità dell'ambiente urbano

XIV Rapporto  
Edizione 2018



STATO DELL'AMBIENTE

**10**  
ISSUES



**SUSTAINABLE MOBILITY**

Car accidents, air pollution, sedentarity, noise, traffic jam, public space occupation, loss of urban space, loss of socialisation, loss of capacity to control the urban territory, are the principal problems that we have to face with as soon as possible.



**PM10, 2017**

- > VL
- ≤ VL

VL : Valore limite giornaliero 50 µg/m³ da non superare più di 35 volte per anno civile

**Mi agg.:** l'agglomerato di Milano comprende i comuni di Milano, Como, Monza e Busto Arsizio

Source: US National Park Service



**PM10, 1 gennaio - 30 settembre 2018**

- n. giorni con media giornaliera superiore a 50 µg/m³ > 35
- n. giorni con media giornaliera superiore a 50 µg/m³ > 10 e ≤ 35
- n. giorni con media giornaliera superiore a 50 µg/m³ ≤ 10

Valore limite giornaliero 50 µg/m³ da non superare più di 35 volte per anno civile

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Source: US National Park Service



**NO2, 2017**

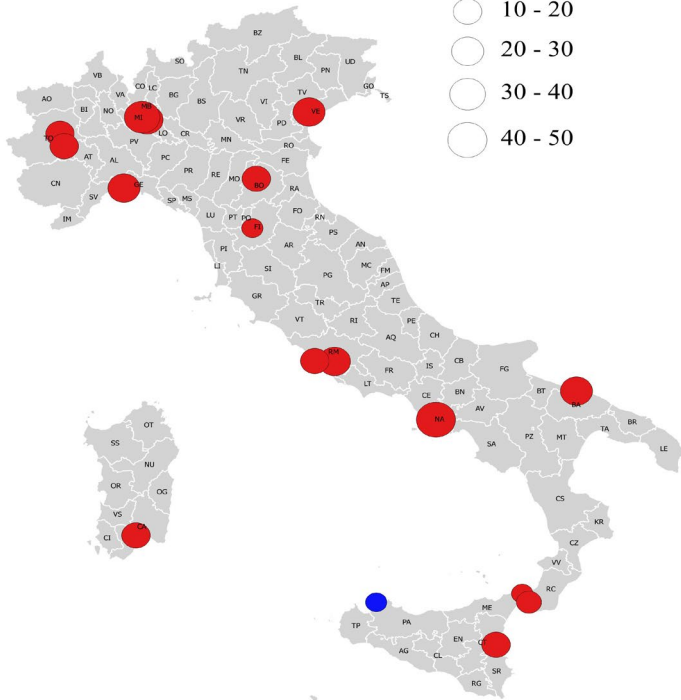
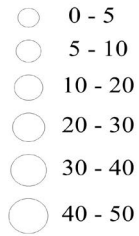
- > VL
- ≤ VL

VL : Valore limite annuale, media annuale = 40 µg/m³

**Mi agg.:** l'agglomerato di Milano comprende i comuni di Milano, Como, Monza e Busto Arsizio

2017

numero di giorni



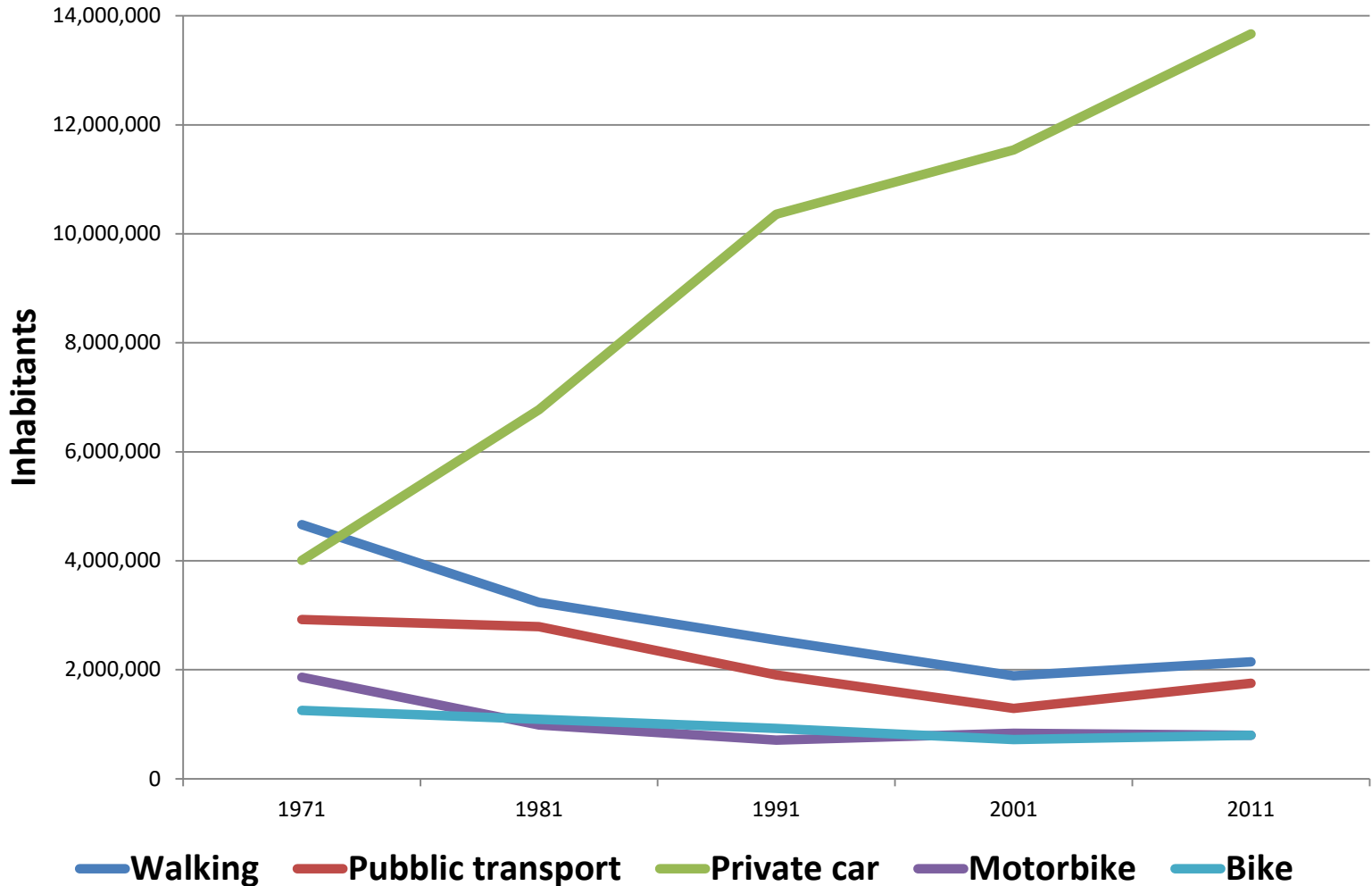
Tropical nights

From **1971 to 2017**, in the 14 Italian metropolitan areas the number of summer days and tropical nights is increasing (**positive trend**)

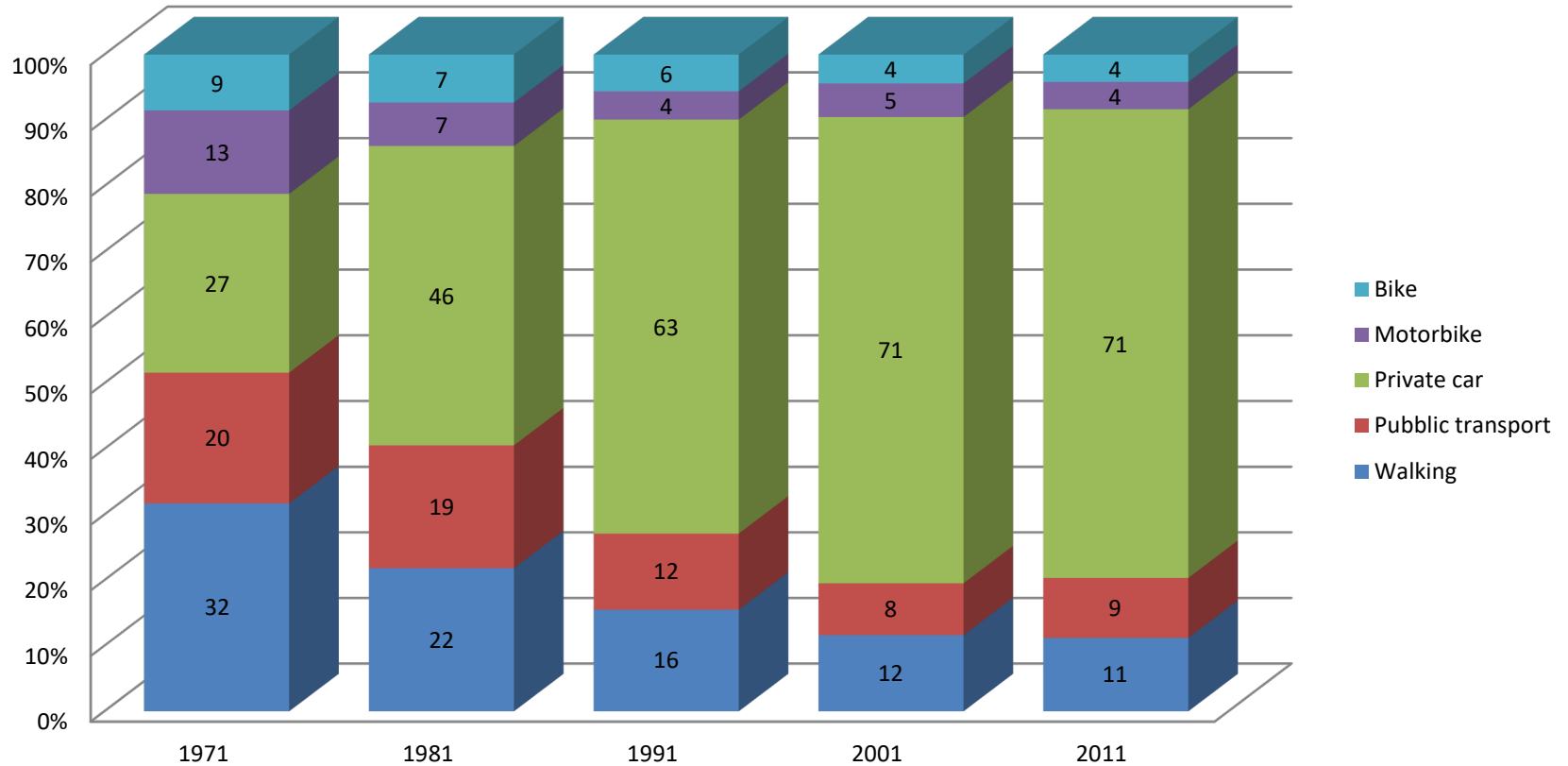
We are aware of the importance to include also the active mobility needs into the planning. A sustainable mobility is cannot be achieved by neglecting active mobility.



## The ways people reach **working place in Italy**, modal split (official survey of population 1971 - 2011)

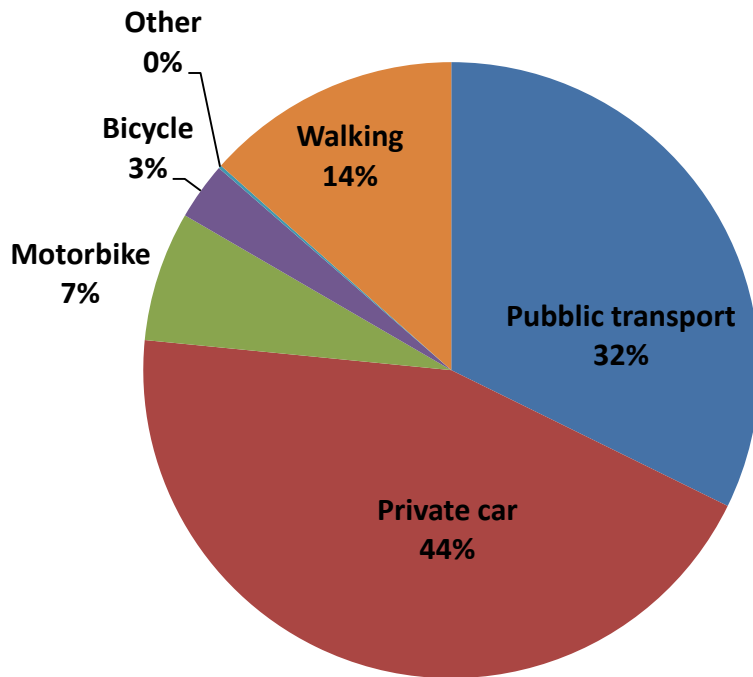


## Percentage of people who usually reach working place in Italy, modal share (official survey of population 1971 – 2011)

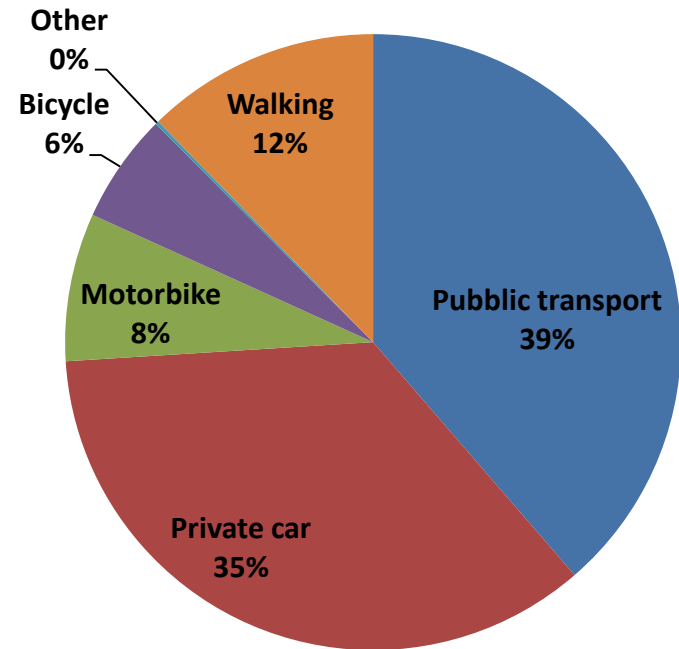


# At local level: Milan municipality

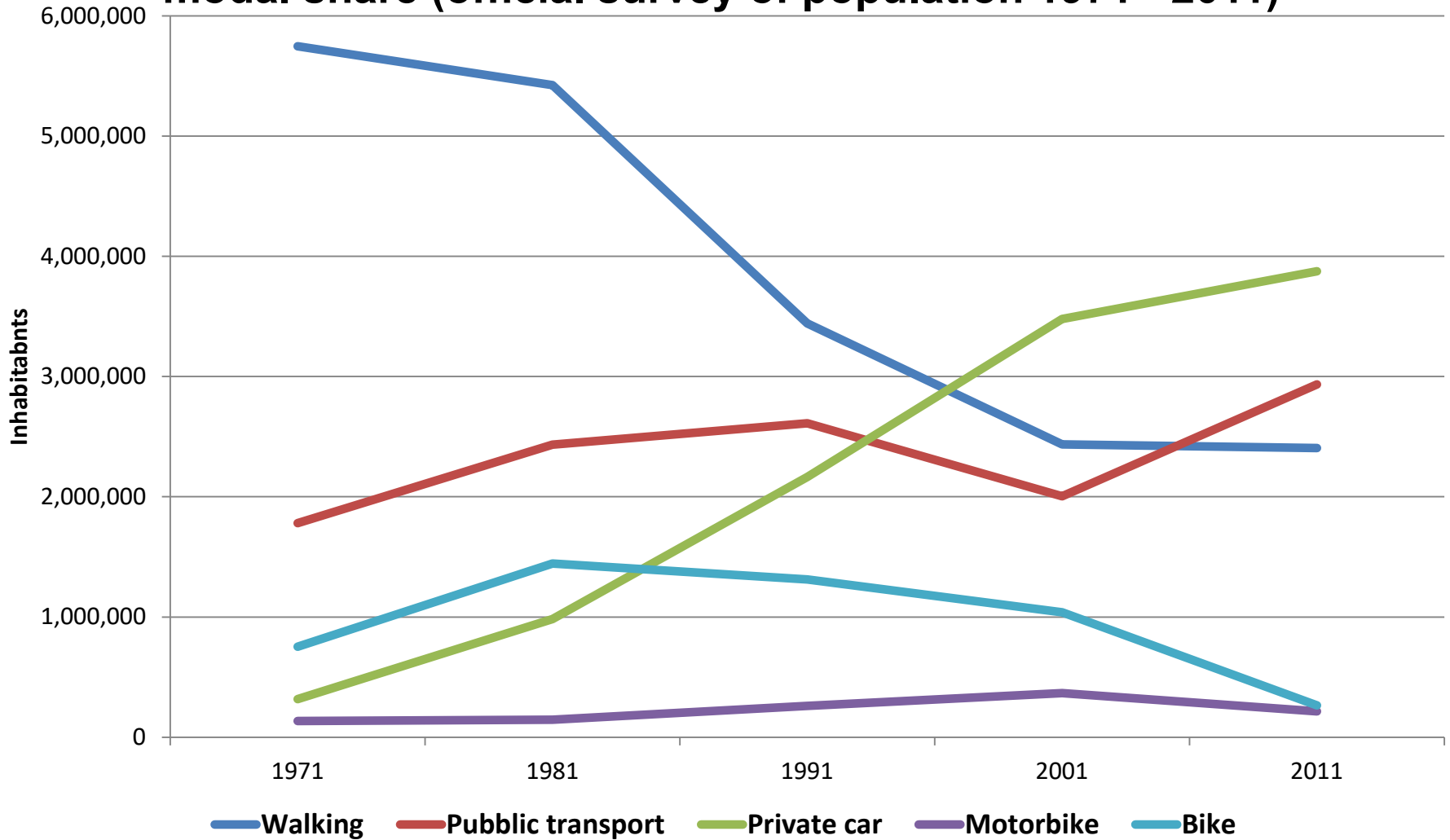
**Milano census 2001**



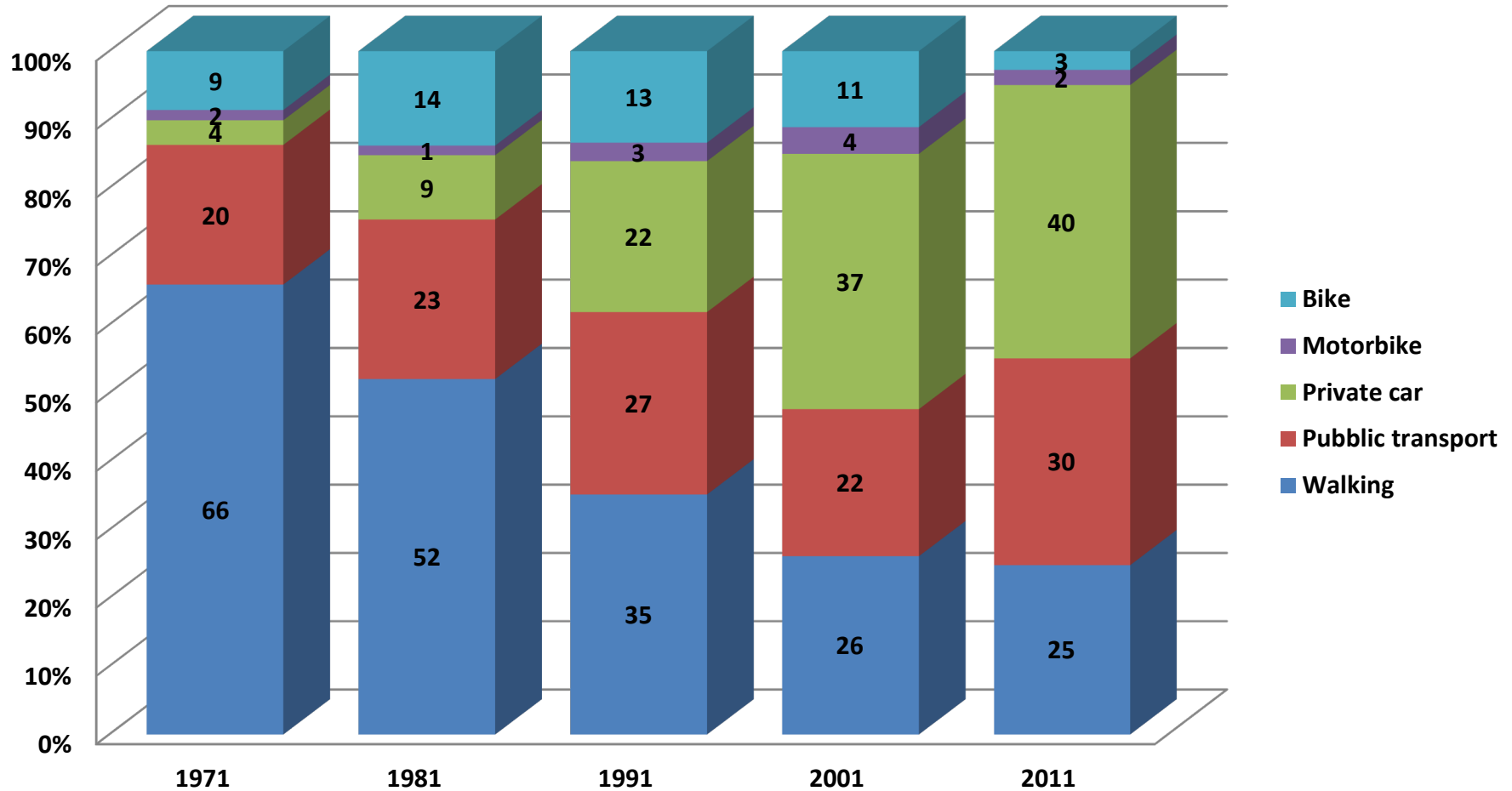
**Milano census 2011**



## The ways people move for studying reasons in Italy, modal share (official survey of population 1971 - 2011)

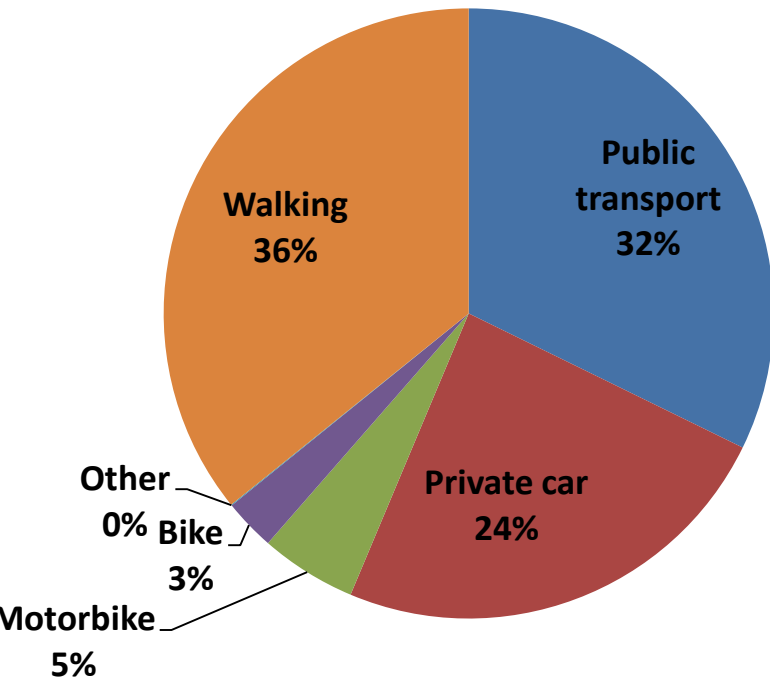


## Percentage of population moving for studying reasons in Italy, modal split (official survey of population 1971-2011)

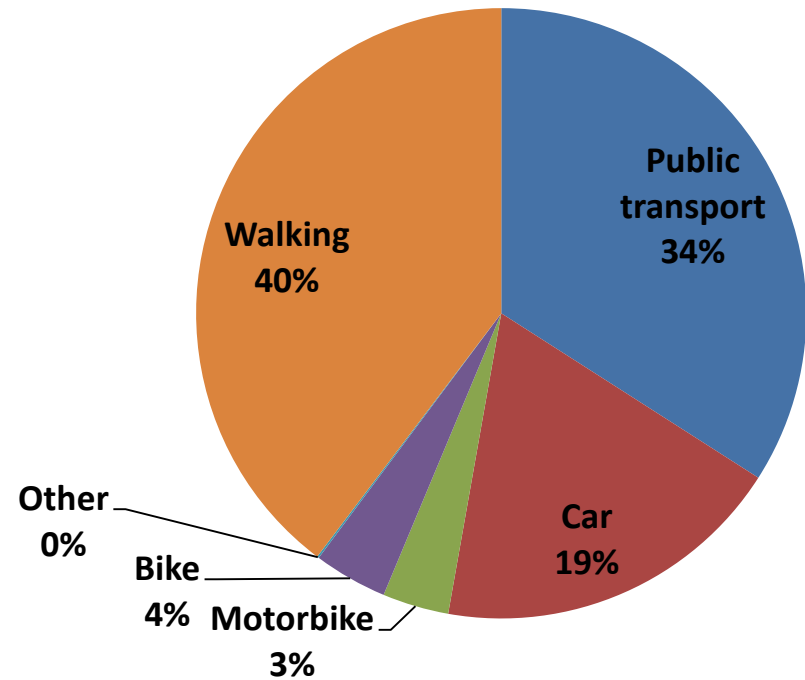


# At local level: the municipality of Milan

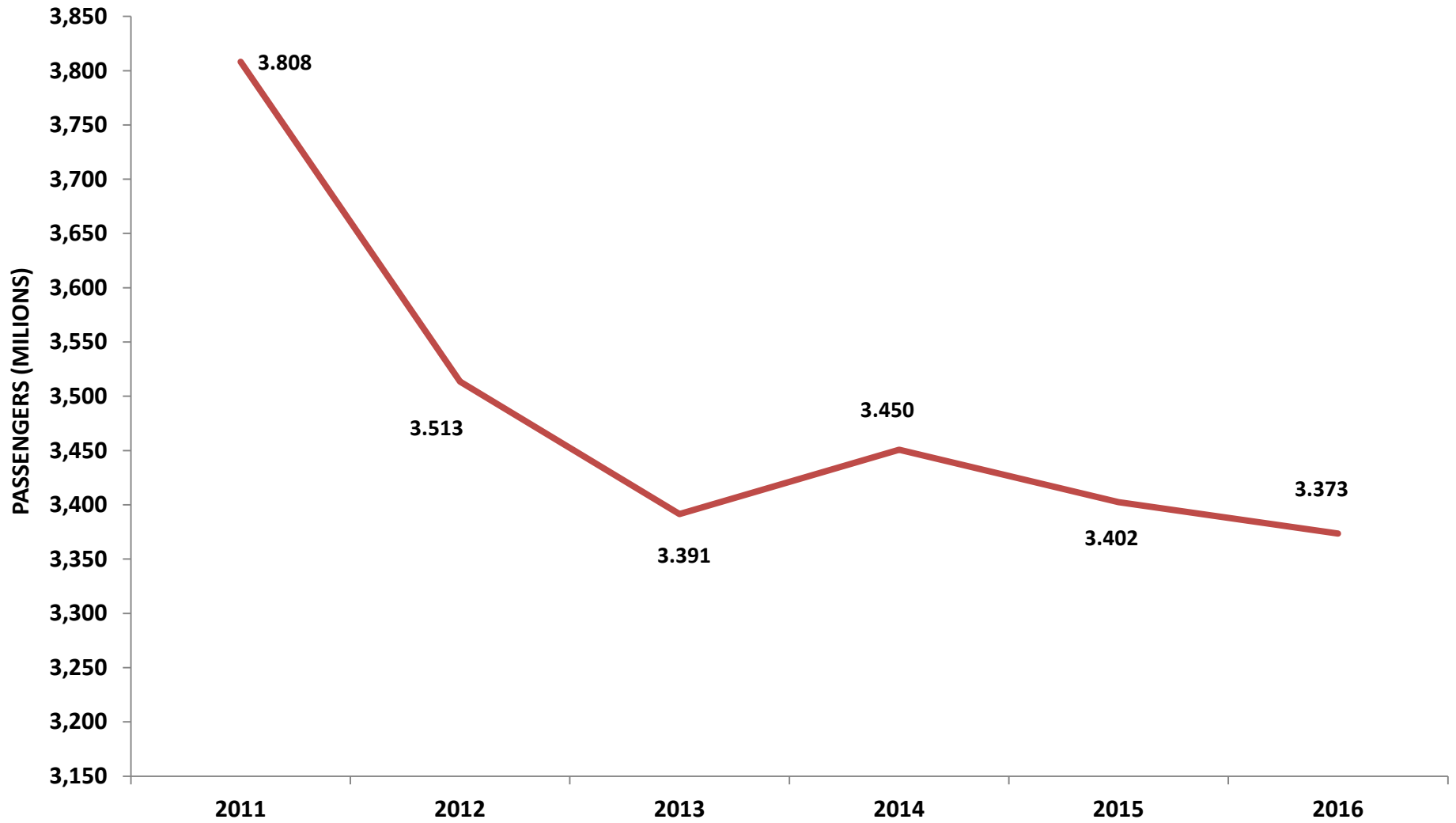
Milano census 2001



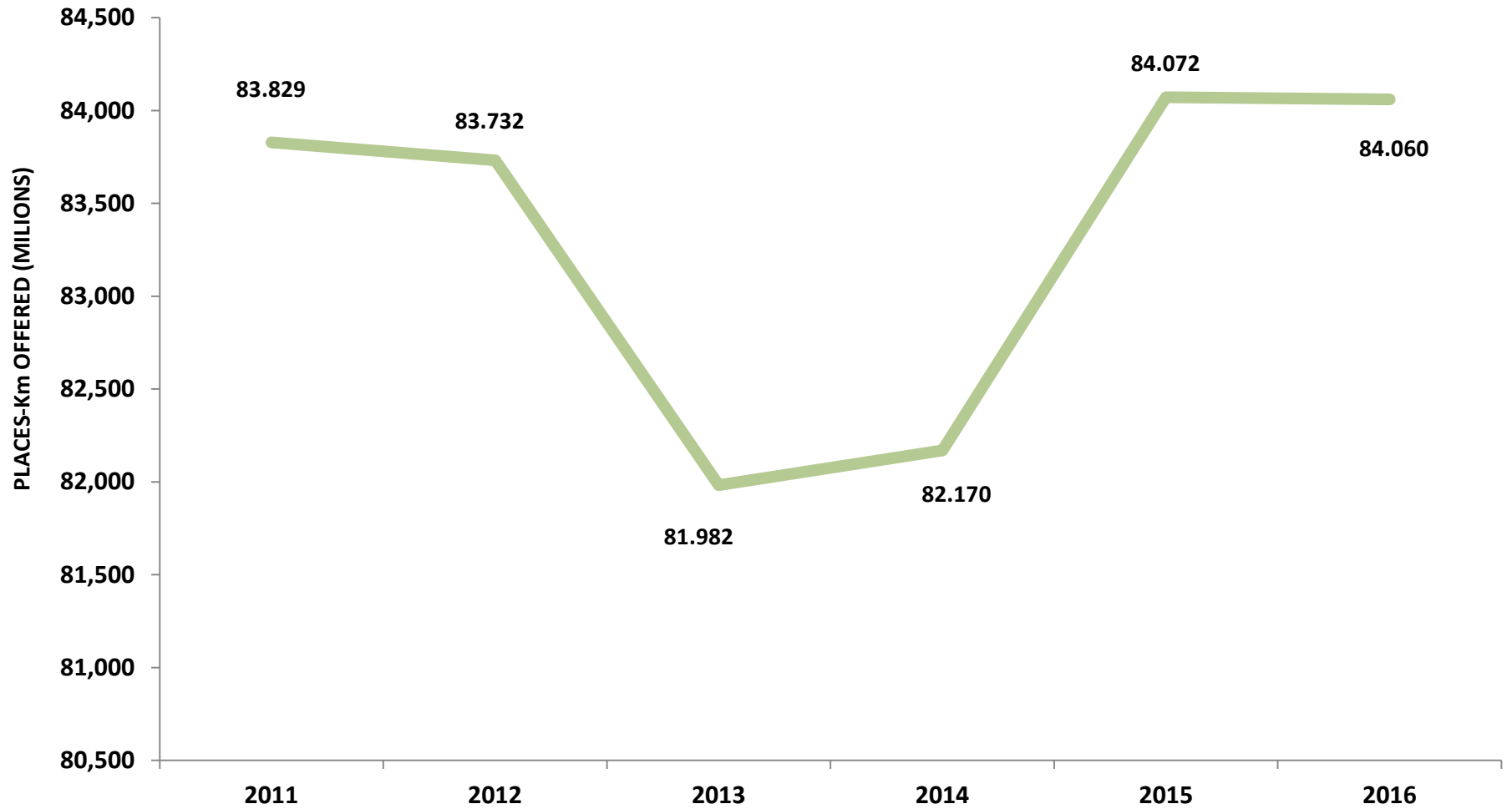
Milano census 2011



## LPT demand for 116 Italian municipalities. Years 2011-2016



## Public transport supply in 116 Italian municipalities -Place/km Years 2011-2016



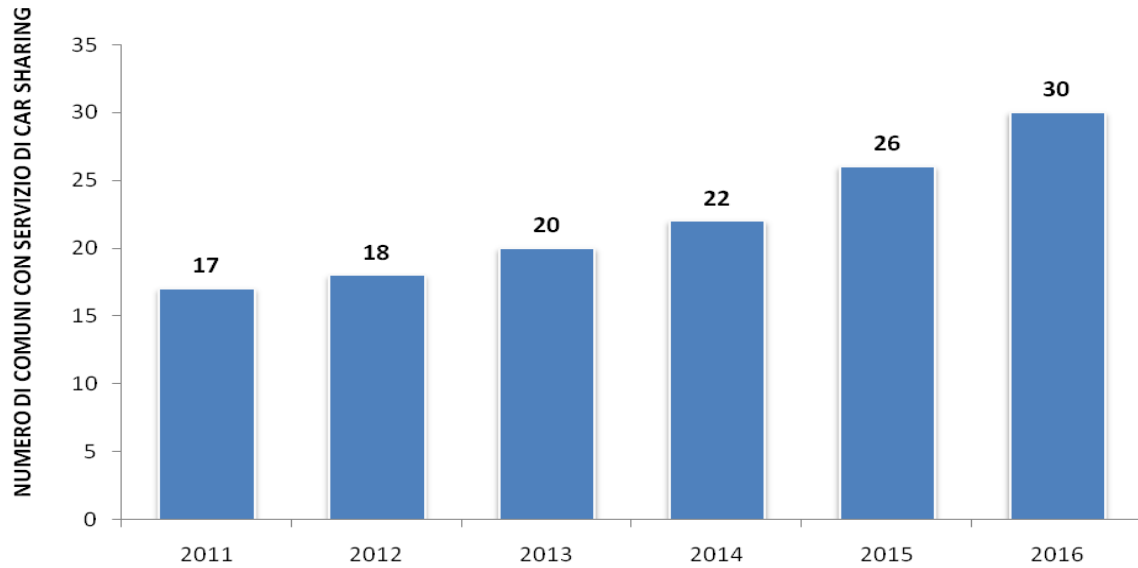


Because of these concerns and awarenesses two years ago ISPRA edited a report about urban pedestrian mobility. Papers written by more than 50 national and international experts belonging to academic and institutional world and to the civil society have been collected. During the presentation of the report, a round table with experts, institutions, environmental associations as well as students took place.

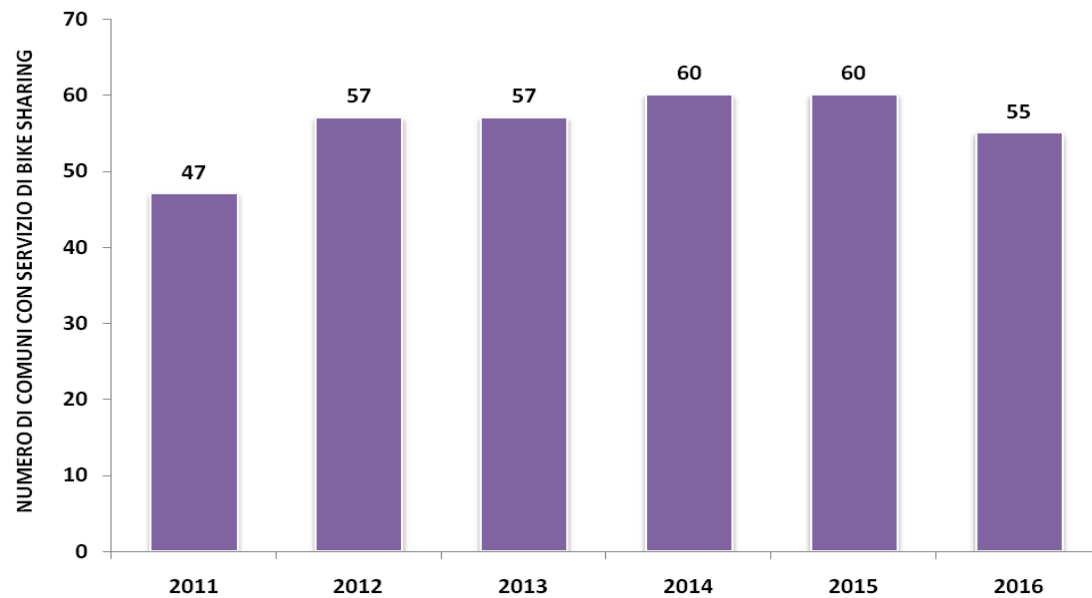
The output of the debate was that in urban planning pedestrian mobility needs must be fulfilled with biking and public transport.

Private cars, responsible of high accident density and air pollution, in central areas of large cities have to be banned allowing citizens to enjoy roads and squares. In residential suburbs it is necessary to introduce “30 or 20 zones” and Limited Traffic Zones.

## Car sharing – fixed and free – 116 municipalities



## Bike sharing – 116 municipalities

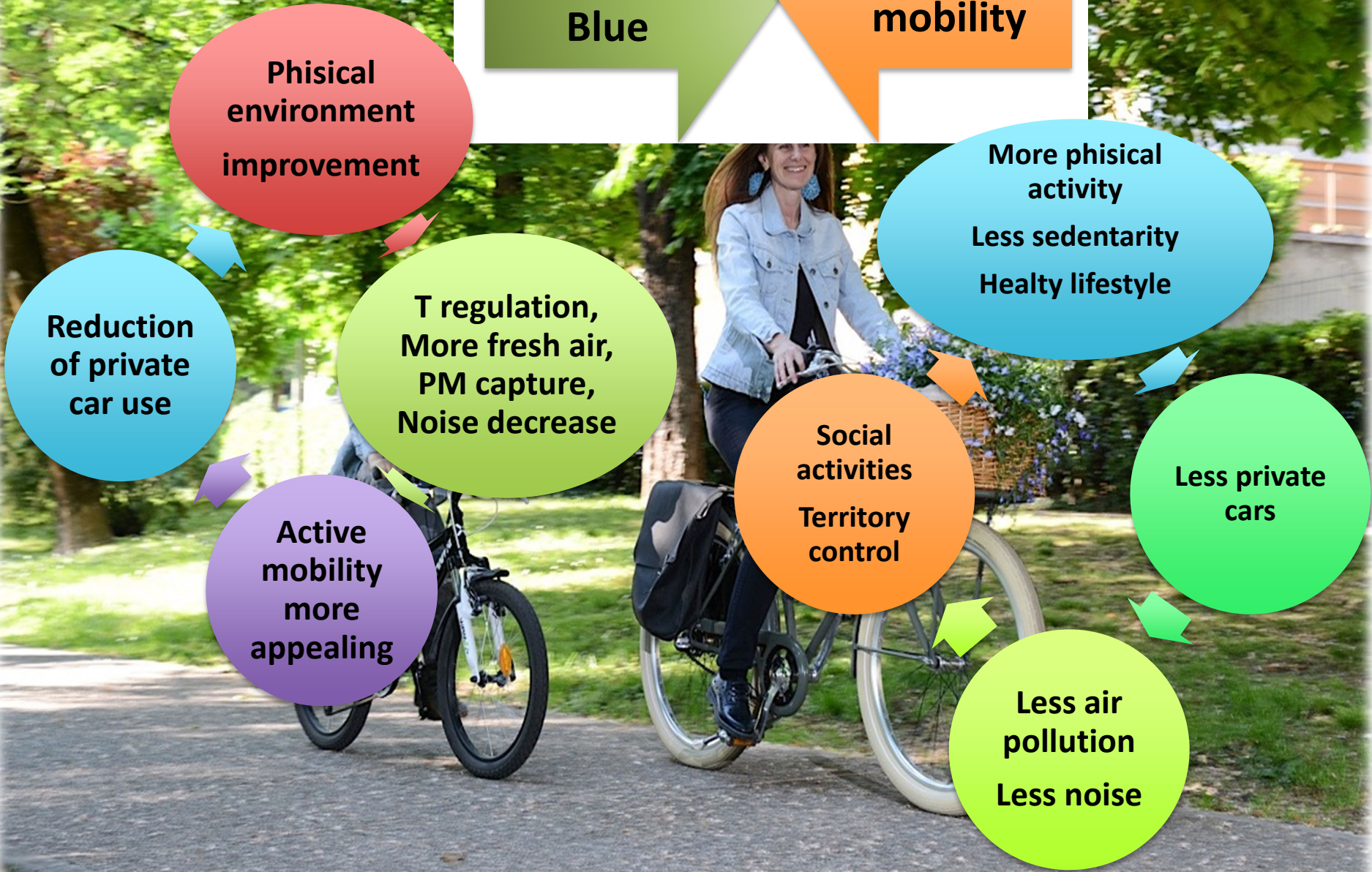
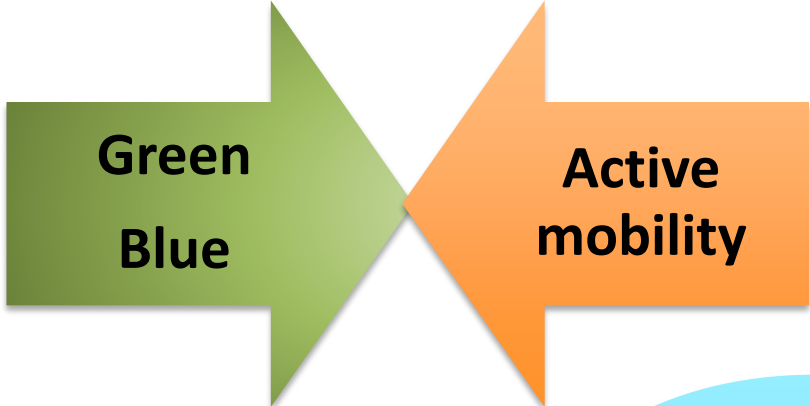




**Piste ciclabili nei comuni capoluogo di provincia - Anno 2016 (valori in km)**

- < 10
- 10 - 40
- 40 - 80
- 80 - 120
- 120 - 241

**The integration between  
green/blue infrastructures with  
pedestrian/cycling lanes is an  
interesting challenge**



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# WALKABILITY INDEX

The prove of the efficiency of integrating green/blue infrastructures with pedestrian mobility was given by several studies. One of the most interesting research carried out by Luis Neto in 2015: the so-called *Walkability Index*.





**Favourite paths has been lined with trees or with blue infrastructures**

**Immagini di Google Street View dei 10 percorsi migliori**

**Amongst the 46 indicators of this approach, the presence of green or blue infrastructures was more relevant compared with others elements.**

**This is a confirmation for the key role of green and blue infrastructures in order to improve urban comfort and the perceived quality of infrastructures for pedestrian mobility suggesting the necessity of a more efficient integration among sectoral policies within the local urbanistic planning.**



# **Comunication, information, training have a special role**

**ISPRA is providing a methodology to compute enviromental benefits as a consequence of measures of sustainable mobility at urban level and**

**The most important challenge is explain to the persons the real benefits that they can have leaving at home the private car**

**SNPA will start next September with a project of citizen science, promoted by EEA, on air pollution and sustainable mobility cleanair@school**

**The project will involve about 100 school in every Italian region and we are confident in the improving of the effectiveness of measures of sustainable mobility**



**THANKS FOR YOUR  
ATTENTION**