



Jenesien

# Integration of Traffic and Environmental data for improving green policies in the city of Bolzano

Bozen - Bolzano



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## The long-term mobility and traffic management strategy of the Municipality of Bolzano

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### URBAN MOBILITY PLANNING

PUM 2020 → LONG-TERM PLANNING

contains the guide-lines for the whole urban mobility actions, foreseen for the next ten years

PUT 2012 → SHORT-TERM PLANNING

contains a more detailed plan of the actions in the next two years





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### MAIN TARGETS OF THE PUM 2020

- improve the quality of public places (squares, roads, parks, etc.)
- improve the quality and efficiency of the public transport
- give a mobility offer more and more attractive due to the requirements of tourism, commerce, culture and services
- reduce the CO<sub>2</sub> emissions related to traffic







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### Modal split:

	Mean 2001/2002	Mean 2005	Autumn 2009			Purpose 2014
On foot	35.2	31.6	29.5			31
Bicycle	17.5	22.7	29.0			30
Bus/Train	7.4	6.6	7.6			9
Moto/Scooter	6.3	6.0	6.7			5
Car	33.6	32.9	27.2			25
Others	0.5	0.2	0.0			0
Total	100	100	100			100
<i>Travel pro citizen a day</i>	<i>3.5</i>	<i>3.4</i>	<i>3.4</i>			





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# WAYS OF ACTION

## PUBLIC TRANSPORT

The main changes in the field of public transport are due to the next projects:

- Tram/metrobus Caldaro > Bolzano
- Tram/metrobus Bolzano Casanova > Bolzano City Center
- modernization of the existing railway and building of a new railway tunnel reserved for good trains (in order to avoid the residential area)
- modernization of the older cablecars
- improvement of the city bus route





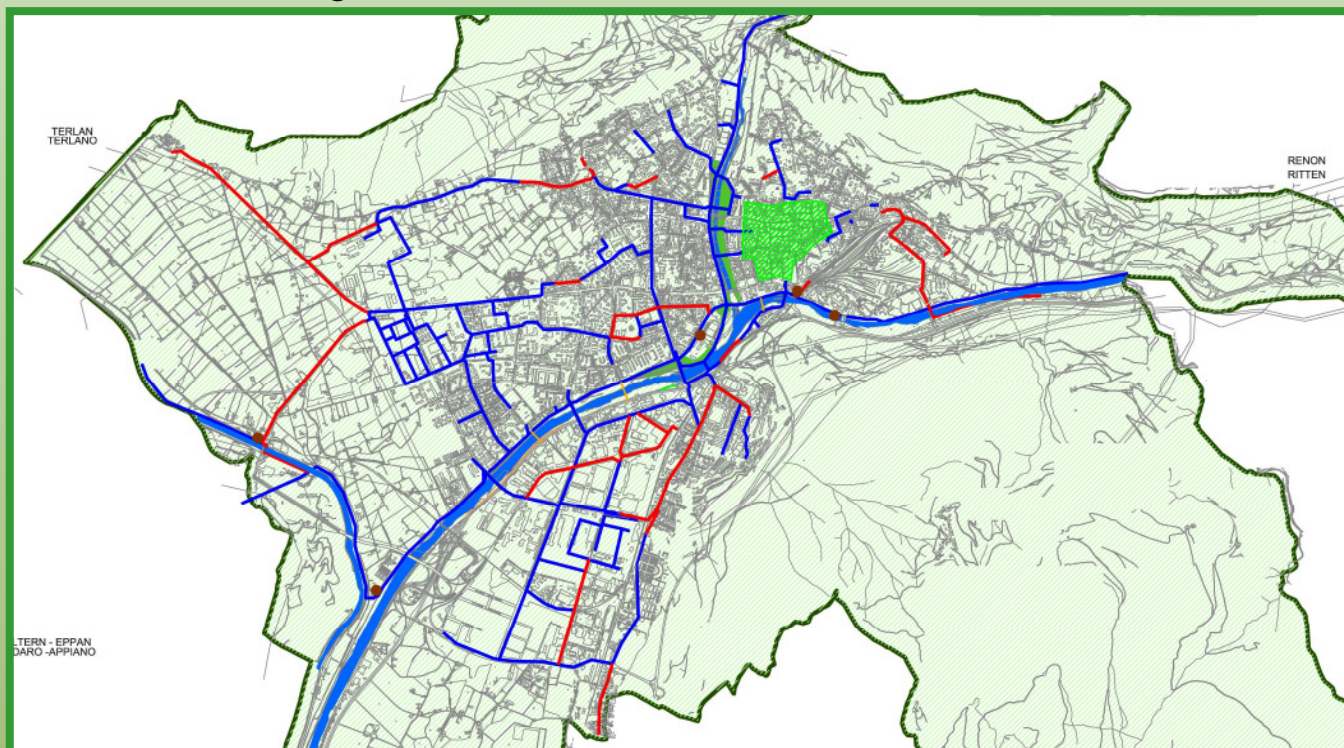




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### BICYCLE LANES

The network of bicycle lanes will be developed with new connections and safety will be increased through infrastructural and educational actions.



— Existing bicycle  
lanes (50 km)

— Bicycle lanes in  
project (15 km)





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### MAIN ROAD NETWORK

The main projects developed in order to transfer the heavy traffic out of the city are:

- **Bypass Sud SS12 “S. Giacomo - Oltrisarco”**

tunnel (3,9 km long) to bypass the industrial area and the Arginale road

- **Bypass Est “Piani di Bolzano - SS504 Val Sarentino” (tunnel 2,5 km long)**

tunnel (2,5 km long) as connection between Piani di Bolzano and Sarentino Valley;  
necessary to move the heavy traffic of Sarentino Valley and San Genesio away  
from the residential area.





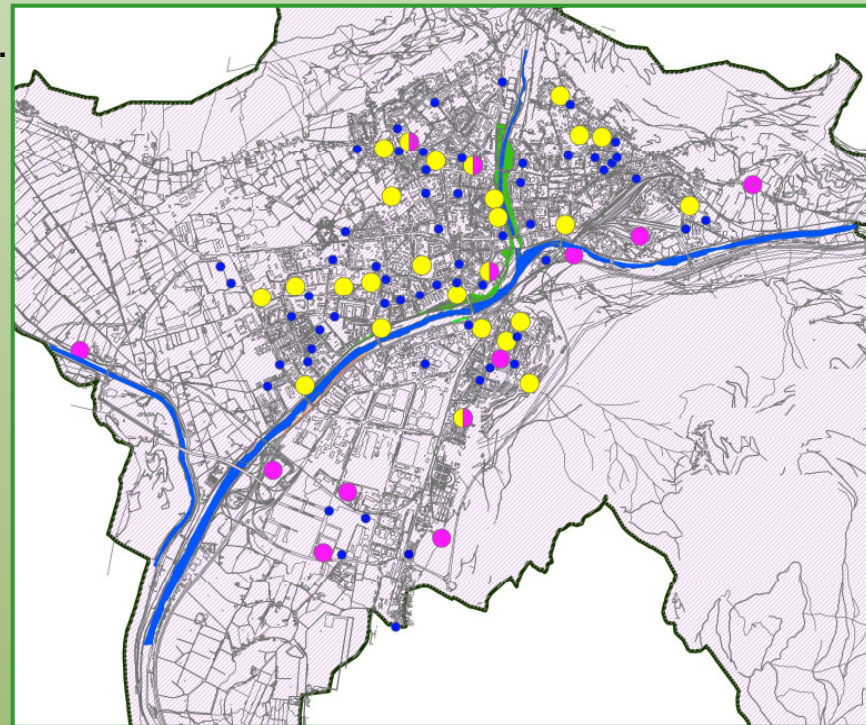




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### PARK POLICY

The development of a parking plan for the city allows us to build new parking areas underground, with the purpose to free streets and squares from the parked cars and use them as pedestrian areas or bicycle lanes.



- Future residential parking structures
- Future public parking structures







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### NEW TECHNOLOGIES FOR TRAFFIC MANAGEMENT

Development of new technologies for the traffic monitoring and management

- Mobility Center
- Parking Guidance System
- Traffic measurement system
- Video surveillance, etc.



#### -EUROPEAN PROJECTS:





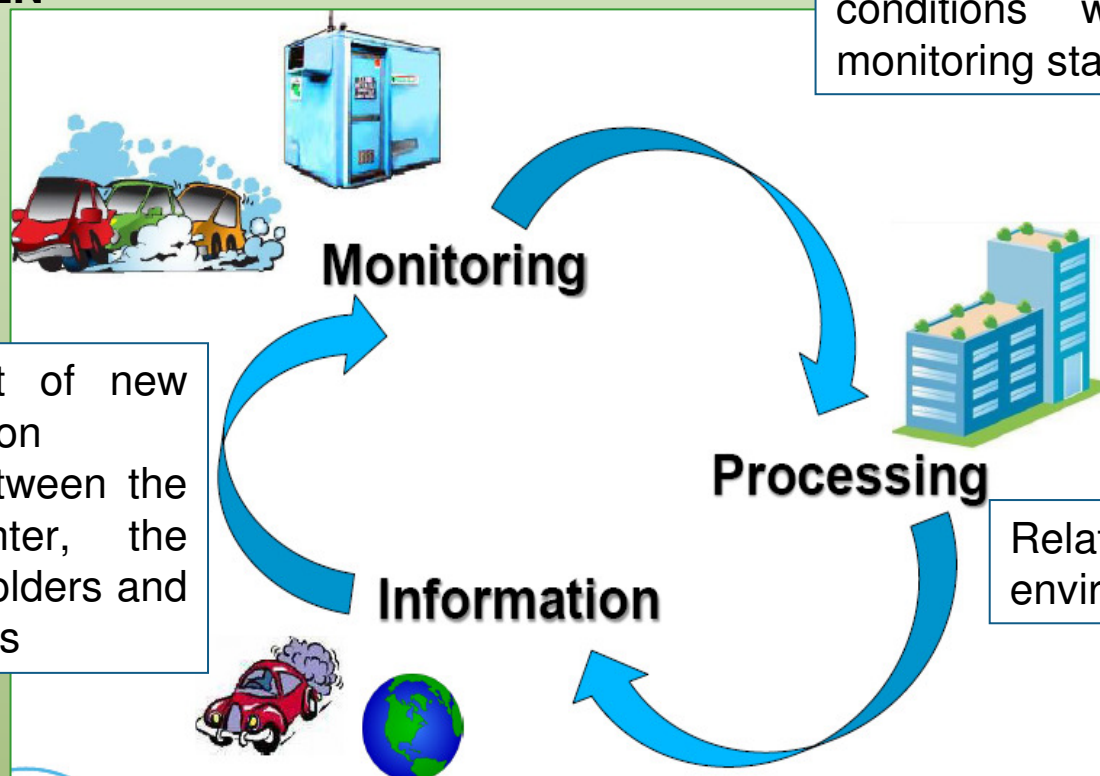


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### THE EUROPEAN PROJECTS

#### INTEGREEN

Real-time monitoring of the traffic conditions with static and mobile monitoring stations (probe-cars)



Development of new communication channels between the Traffic Center, the main stakeholders and the final users

Relations between traffic and environmental conditions

Dynamic regulation of traffic lights, park guide system, info panels, etc.





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### INTEGREEN

*Integration of Traffic and Environmental data for improving green policies in the city of Bolzano*



Make the final user aware of his influence on traffic and air pollution

Apply a dynamic traffic - regulation in order to reduce the environmental pollution



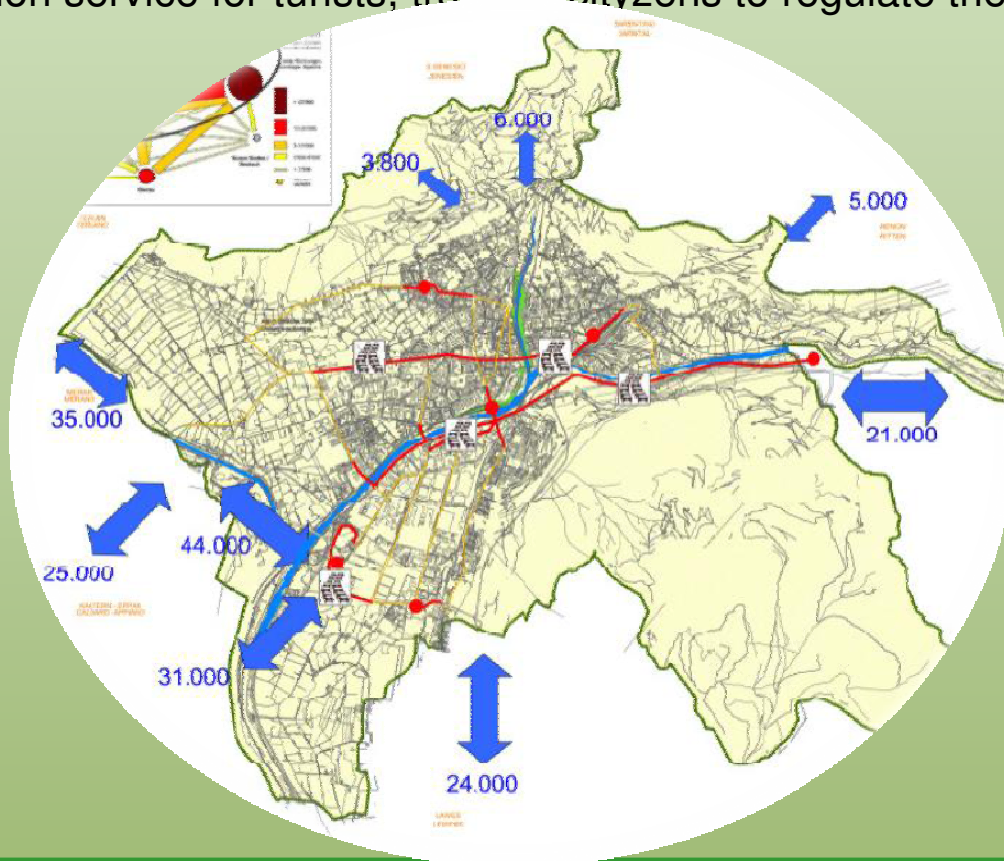


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### BOLZANO TRAFFIC

Traffic information service for tourists, traders, citizens to regulate the flows in and out of the city.

#### PRESENT SITUATION:



First step:  
monitoring of the  
traffic flows in and out  
of the town



- Type of vehicles
- critical situations
- favourite ways







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### **BOLZANO TRAFFIC**

#### Main goals of the project:

- forecast the main seasonal traffic phenomena
- in time monitoring of the traffic flows in and out of the city (O/D)



- plan the best solutions
- inform travellers before and during the trip about the best route due to traffic conditions.





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### REZIPE

Shows methods for reducing the emissions of carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and fine dust (PM<sub>10</sub>) by introducing zero emission vehicles (ZEV) in urban environments. The energy used in ZEV derives from renewable and clean energy sources. The vehicles are tested in pilot projects implementations in six European cities.



intEgreen



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### REZIPE

- New photovoltaic charging station for e-bikes installed in the city of Bolzano
- A second one will be installed
- 15 e-bikes are used by municipal employees for business trips.

