



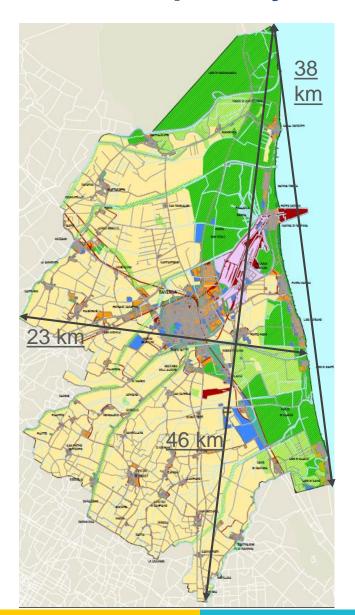
# SUMP of Ravenna: relevant experiences on travel behavior change

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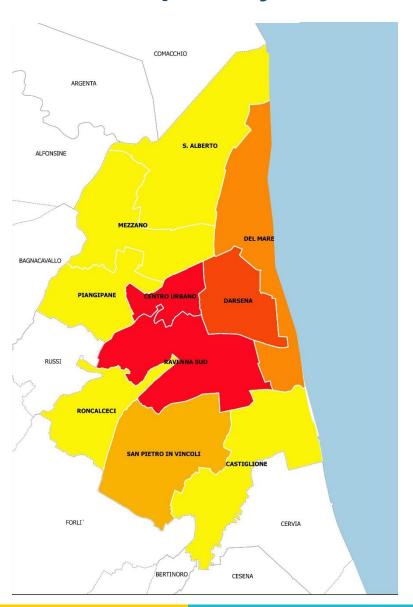


#### **Territorial information**

- Extension: 652,22 sq.Km
- Population: 160.000 inhab.
- Road network: 1.620 Km
- 1 chief town and 64 small centers in the municipal territory

- Naturalistic area
- Rural area
- Port area
- Urban area
- Environmental system
- Equipment system
  - Mobility system





#### Information on population

#### Residents

> 25.000

20.000 - 25.000

15.000 – 20.000

10.000 - 15.000

<10.000

Average age: 46 years

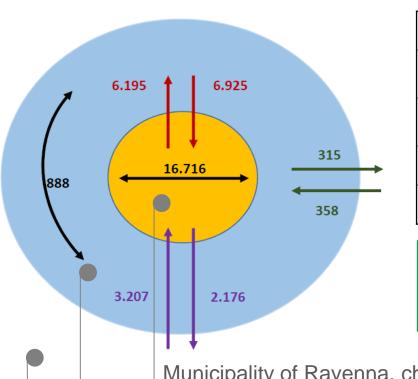
Average inhab/km2: 244

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#### **Mobility information**

N° of daily journeys to work or school (2015):



	Ravenna	Suburbs	Other	Total	%
Ravenna	16.716	6.195	2.176	25.087	68,2
Suburbs	6.925	888	315	8.128	22,1
Other	3.207	358	0	3.565	9,7
Total	26.848	7.441	2.941	36.780	100

More than 45% of all journeys are inside the chief town

Municipality of Ravenna, chief town

Municipality of Ravenna, suburbs

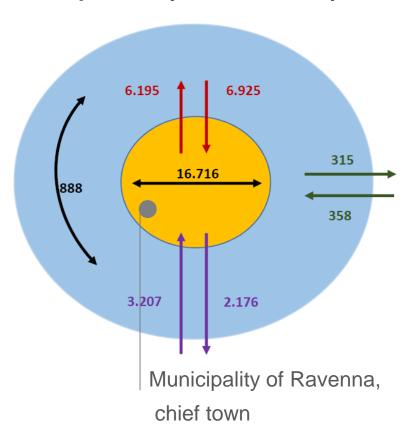
Other municipalities

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#### **Mobility information**

Car journeys in the city center (2015):



Distance	Journeys by car, %
d < 1km	2
1 < d < 2 km	12
2 < d < 3 km	19
3 < d < 4 km	20
4 < d < 5 km	17
0 < d < 5 km	70

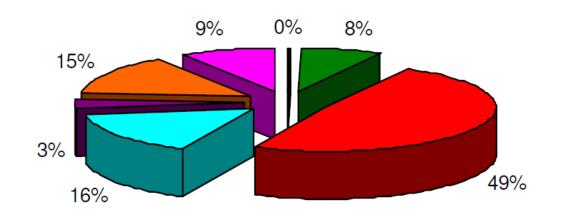
Considering the short distances, using bikes o PT it could be possible reduce the n° of vehicles of 8000-9000 in the peak hours.





#### **Mobility information**

Modal split – Journeys inside Ravenna, general view (2011):



■ Train

Motocycle

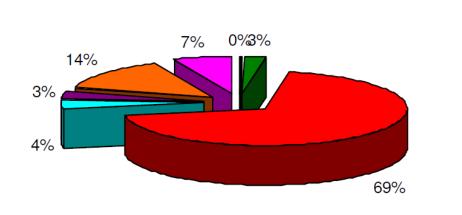
■ Bus

- Cycling
- Car (driver)
- Walking
- Car (passenger)

PT + Walking + Cycling = 32%



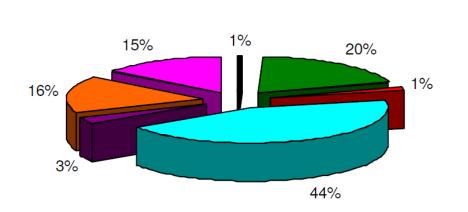
#### Modal split – Journeys inside Ravenna, workers (2011):



- Train Motocycle
- Bus □ Cycling
- Car (driver)
   Walking
- Car (passenger)

PT + Walking + Cycling = 24%

#### Modal split – Journeys inside Ravenna, students (2011):



- Train Motocycle
- Car (driver)
   Walking
- Car (passenger)

PT + Walking + Cycling = 52%





# SUMP: MAIN TOPICS, BEHAVIOR AND ACTIONS

## SUMP: Participation process

#### Participation process – Winter and Spring 2016

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- 1 On line survey
- 7 Focus groups
- 5 Workshops
- 2 World Cafè
- 2 Specific events

Social media and communication





## SUMP: Focus on Participation





1 On	line	survey
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Cyclability, safety, public transport

#### 7 Focus Groups

- Schools and Educational institutions
- Economical activities in the city center
- University students (age<26)</li>
- Elderly people (>65)
- Historic center inhabitants
- Suburbs inhabitants
- Coastline inhabitants

#### 5 Workshops

- Public Transport
- Limited traffic area and Restricted Traffic Zone
- Accessibility for all
- Public Health and Environment
- Walkability, cyclability and intermodality

2 World cafè

- Proposal on parking policies, cyclability, public transport
- 2 Specific events
- Modal split, Accessibility

## Results of Participation Process: SUMP main topics

- Public transport
- Parking policy
- Pedestrian areas
- Safety
- Electric mobility
- Cruise port related mobility
- Urban freight
- Accessibility for disabled people
- Cycling
- Traffic calming
- New infrastructures

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## From Topics to Actions for Travel Behavior Change



#### **Topics**

+ Data

**Actions** 

- Public transport
- Parking policy
- Pedestrian areas
- Safety
- Electric mobility
- Cruise port related mobility
- Urban freight
- Accessibility for disabled
- Cycling
- Traffic calming
- New infrastructures

45%

of journeys are inside the chief city

70%

of car journeys inside the

chief city are

comprised

from 0 to 5 km

A Free parking + free bus

**B** Limited Traffic Zone

C Parking subscription

D Project with students

E Traffic light timing

F Job ticket

G Tests with citizens



## Actions for Travel Behavior Change



Actions	A Parking + free	B Limited Traffic	C Monthly Parking	D Project with	E Traffic light	F Job ticket	G Test with citizens
Topics	bus	Zone	subscription	students	timing		0.0.201.0
Public transport	~	~				<b>~</b>	~
Parking policy		~	_	_		<b>~</b>	~
Pedestrian areas		~					
Safety		<b>~</b>		<b>~</b>	<b>&gt;</b>		
Accessibility (disability)		<b>~</b>	<b>✓</b>				<b>~</b>
Cycling		<b>~</b>		<b>~</b>	<b>~</b>		<b>~</b>
Traffic calming	<b>~</b>		<b>/</b>	<b>~</b>	<b>~</b>	<b>~</b>	
New infrastructures				<b>~</b>			

## A\_ Free Parking + Free Bus

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#### Marina di Ravenna – Summer 2004, Today







#### Aim:

Avoid traffic and parking along the coastline.

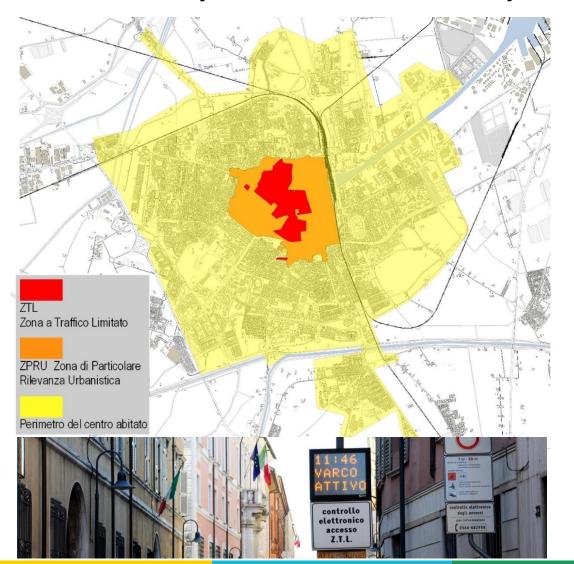
- During spring and summer week ends, free parking and free busses each 12 minutes.
- Parking toll along the coastline
- Strict parking policy in beach facilities paths



## interreg Europe

## **B\_ Limited Traffic Zone**

#### Ravenna city center – 2007, Today



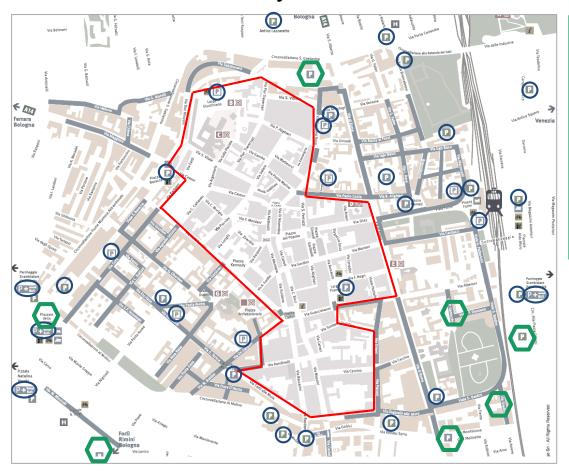
#### Aim:

Reduce congestion and pollution in the city center, free access by bike, by PT and on foot: first implementation to change the citizens' approach.

- Daily 7:30 20:30
- Axes lenght: 1,2 km for 0,85 km

#### **InnovaSUM** C\_ Parking Monthly Subscription

Ravenna, parking outside the city center – March 2016, Today



#### Parking with monthly Parking with no subscription

subscription



#### Aim:

Help residents to find a parking slot, let the city center parking spaces to city center business and shops, reduce traffic in the historic inner.

- Parking spaces at walking distance to the city center
- 25€/month
- It can be used on different cars

## D\_ Cycle path project with Students

Ravenna, Middle school Don Minzoni – 2010







#### Aim:

Improve awareness of mobility choices in students and make them participate actively to a city project

• Involve students – and indirectly, their families - in the project of the cycle path that connects the school to the city bike network.



## E\_ Traffic Light Timing

#### Ravenna, Middle school Don Minzoni – 2010









#### Aim:

Clarify the priorities in traffic flows, make the road crossings safer, foster the decision to let students go to school by bike, by public transport and on foot.

- During the school year
- Priorities to the pedestrian crossing 30 minutes after the closure of the school



### F Job Ticket

#### Ravenna – Winter 2006, Today

#### Job Ticket Yearly Passes - Ravenna



Passes valid for one year (12 months), starting from the 1st day of the selected month. They are personal and make it possible to travel with all means within the route shown on the card. They are sold only at Start Romagna ticket offices and are dedicated to employees of companies which have endorsed an agreement with Start Romagna - Area of Ravenna. In order to be issued, a recent passport photo is required.

JOB TICKET YEARLY PASS FARES TABLE	
PASS	PRICE
1 Area	€ 175,00
2 Areas	€ 243,00
3 Areas	€ 320,00
4 Areas	€ 368,00
5 Areas	€ 411,00
6 Areas	€ 450,00
7 Areas	€ 488,00
8 Areas	€ 526,00

#### Aim:

Support public transport for workers in order to reduce congestion and pollution

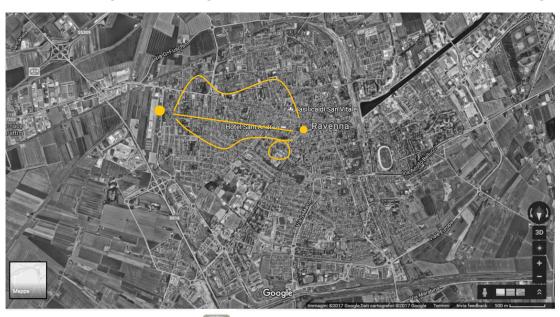
Thank to an agreement between companies and public transport, employees have a discount on yearly subscription.



## G\_ Tests with citizens

#### Participation process – Winter and Spring 2016





Parking area connected with bus to the center



<u></u>

Main square Piazza del Popolo







#### Aim:

Support awareness about mobility choices stressing that car isn't always the faster choice...

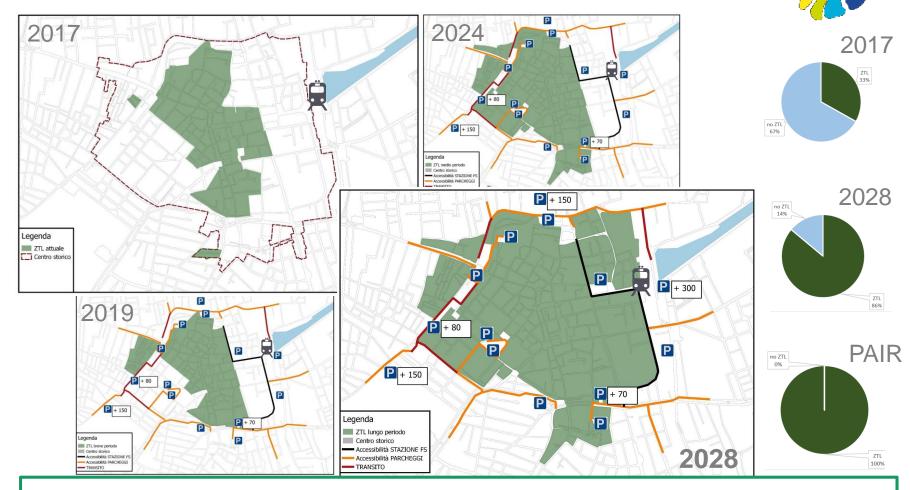
"Is it better by car?" Test with citizens: from suburban to the main square with 3 different means of transport: cars, bikes and bus.





## SUMP: SYSTEMATIZATION OF ACTIONS

#### Limited Traffic Zone – Extension



The Regional Integrated Plan for the Air Quality PAIR – approved last April – requires to transform all the extension of the historic centers in Limited Traffic Zone by 2020.

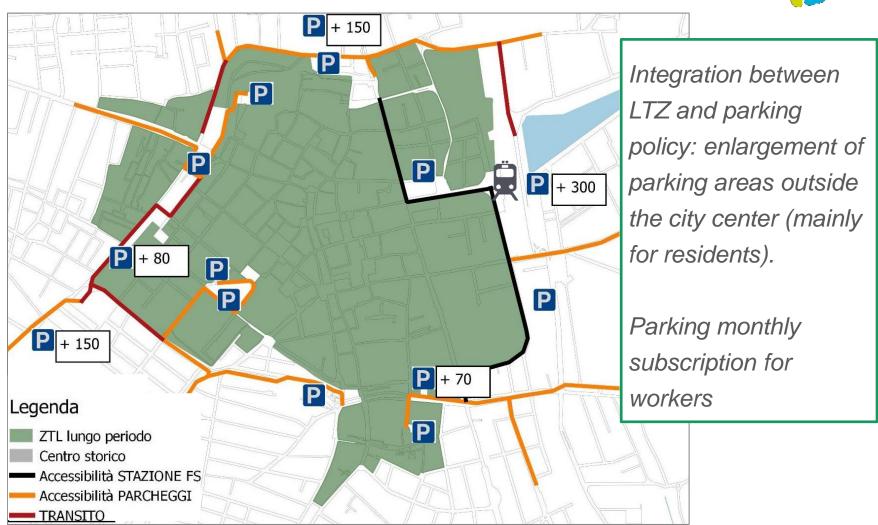
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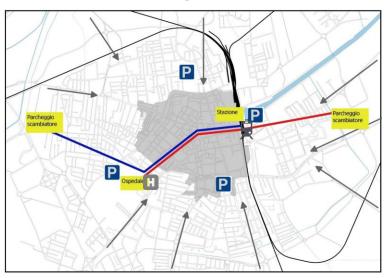
## Systematization of Actions

#### Parking policy



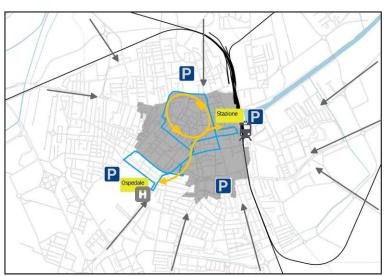
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#### **Public Transport**



New lines and electrical vehicles to make public transport more and more attractive, sustainable and foster policies like "job ticket".

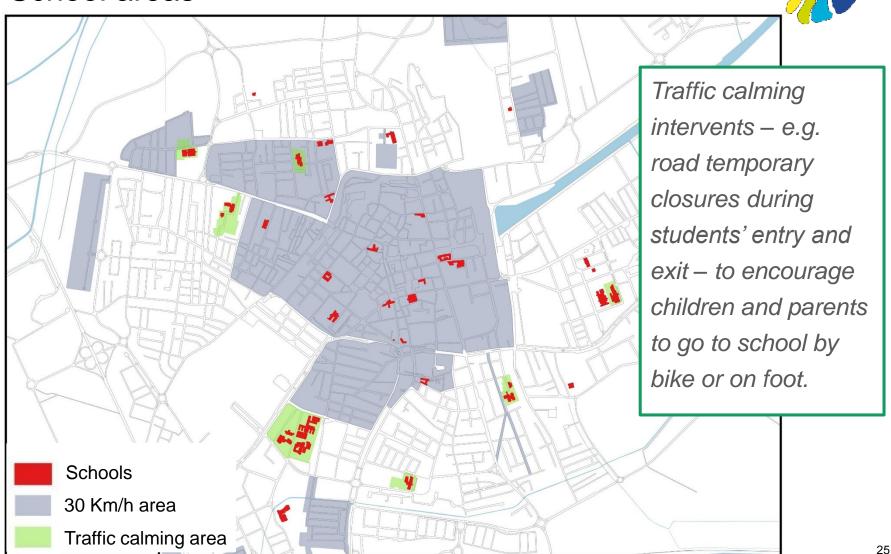
Better connection between chief town and suburbs.



Electrical vehicles for high frequency services.

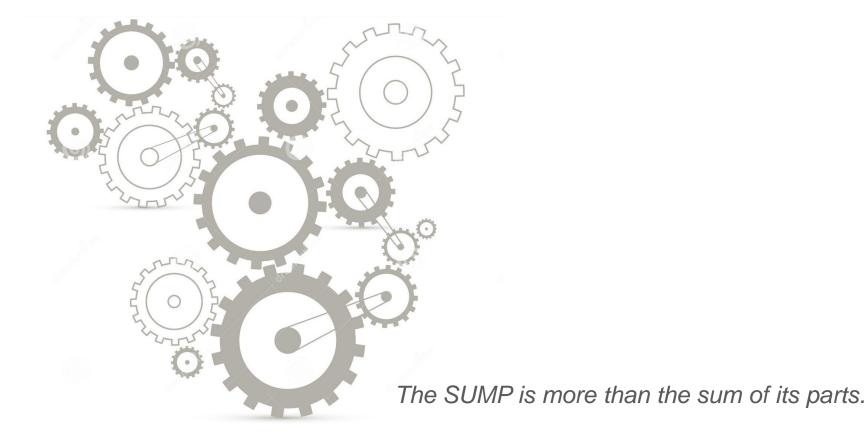


#### School areas













Thank you!





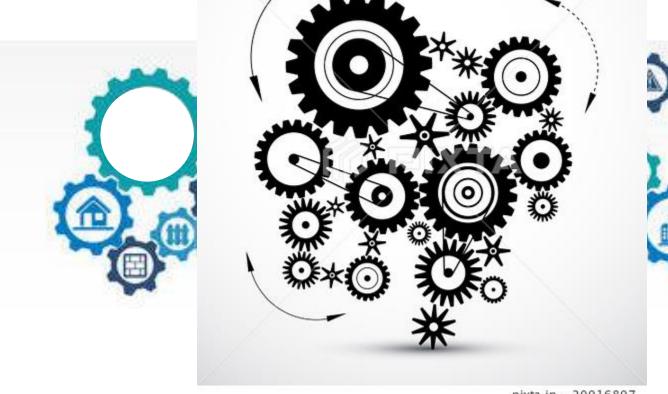














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