

# I European Conference on Sustainable Mobility at Universities

Universitat Autònoma de Barcelona

**UAB**

Universitat Autònoma de Barcelona

8, 9, 10 March 2017

UNIVERSITAT AUTÒNOMA DE BARCELONA

Speaker: MARIA ROSA RONZONI  
For the **Net of Italian Universities MM**

Topic: **BEST PRACTICES IN ITALIAN UNIVERSITIES**



The conference is in the Framework of the European Project about sustainable Mobility: U-MOB LIFE.



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## Mobility Management in Italian Universities: Regulatory Compliance and Mobility Best Practices

*Results of a Preliminary Survey*

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## Mobility Manager and Home-Work Transfer Plan (HWTP)

The Environmental Law n. 27/03/1998 establishes as follows for (private and State-owned) companies located in pollution areas and **with more than 300 employees for local unit** or with a **total number of employees greater than 800 in different local units**:

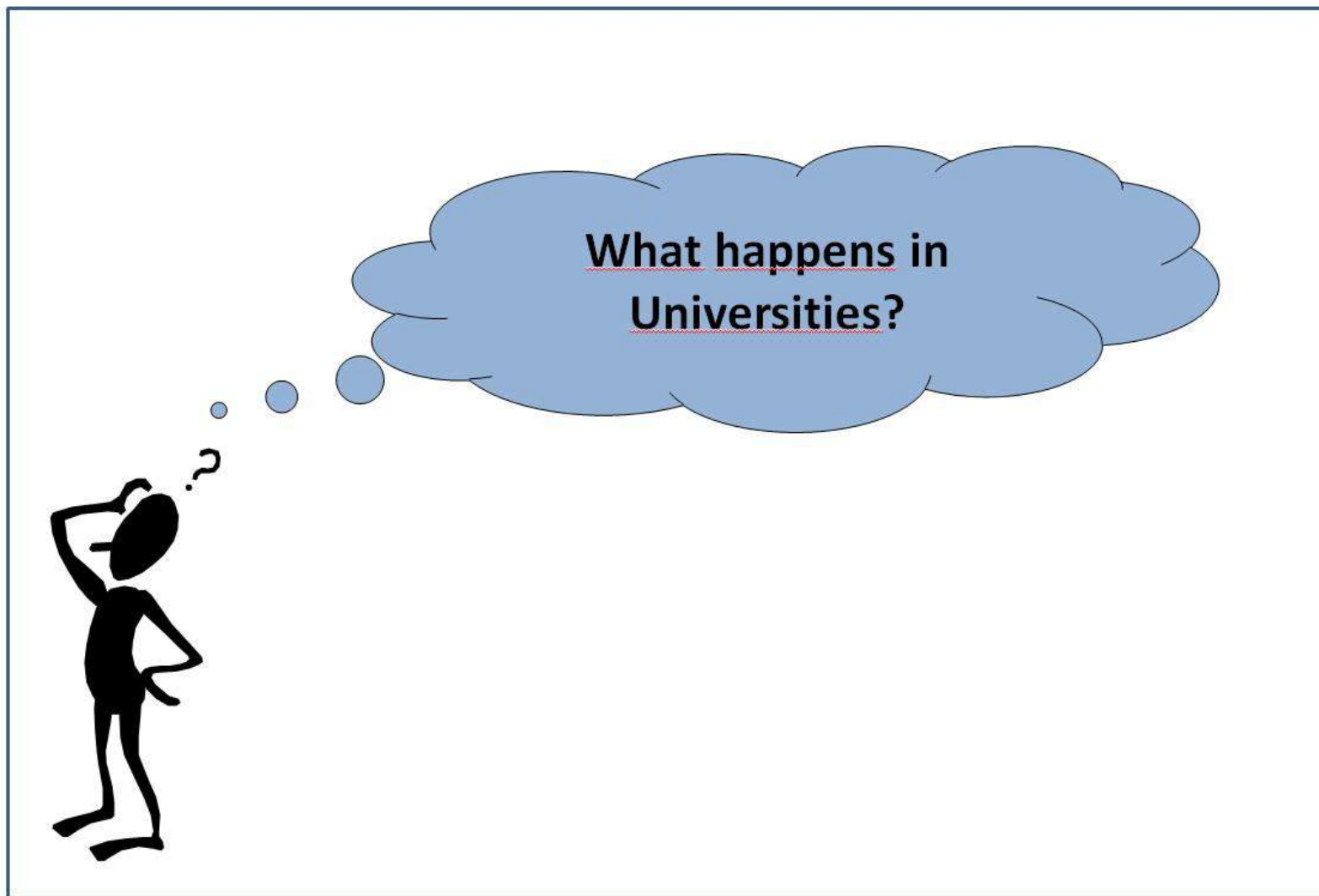
- Appoint a **Company Mobility Manager**  
→ **TARGET: to develop a strategy for sustainable mobility and for reducing the use of private cars**
- Adopt a **Home-Work Transfer Plan for its employees**  
→ **Target: to reduce the use of private cars and traffic congestion through a better organization of working hours**
- **The Home-Work Transfer Plan must be sent to the local municipality every year**
- **The Home-Work Transfer Plan must be updated every year**





## The Home-Work Transfer Plan

- Examines jobs arrangement, internal logistics and access to the job/study site with respect to transport services and connections viability
- Identifies strategies bearing advantages to all stakeholders of mobility



## Mobility Management in Italian Universities: Preliminary Survey

In 2016 Sustainable Services of the Politecnico di Milano carried out a preliminary survey in accordance with the University Mobility Managers National Committee (CNMMU), on University Mobility Management activities

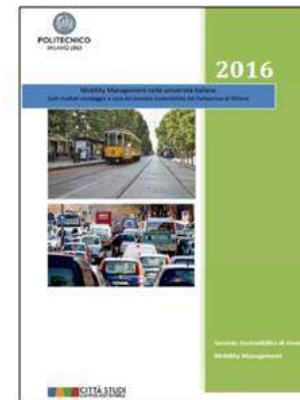
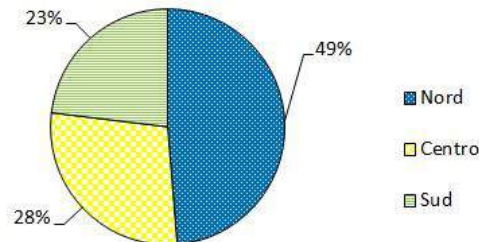


The questions to the Universities involved in the survey were as follows:

- Is there a Mobility Manager ?
- Is there a Home-Work/Study Transfer Plan (HWTP) ?
- In absence of a HWTP, has the University adopted specific actions of Mobility Management ?

**81 Italian Universities contacted: 39 responded (48%)**

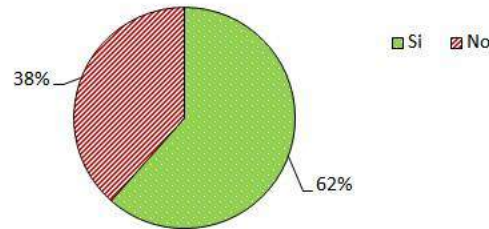
### Location of responding Universities



## Preliminary Survey: Results (1)

### Mobility Manager:

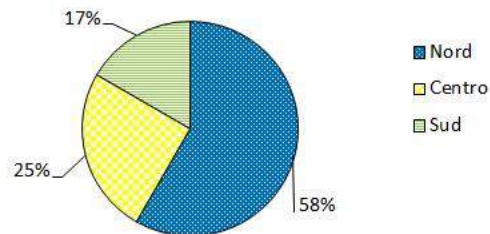
#### Universities with a Mobility Manager



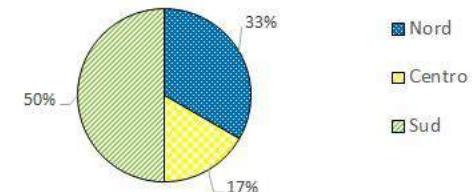
**4 Universities appointed a Mobility Manager even if they are not required by law**

**15 Universities do not have a Mobility Manager; 6 of them should have it by law**

#### Location of the Universities with a Mobility Manager



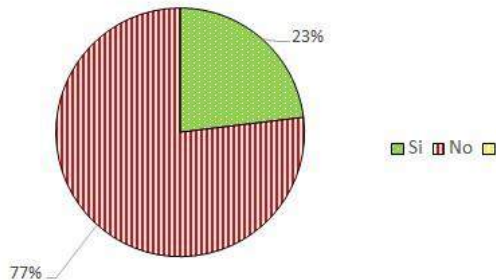
#### Location of the Universities with no Mobility Manager, although required by law



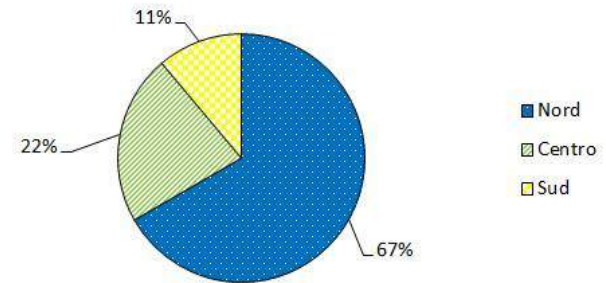
## Preliminary Survey: Results (2)

### Home-Work/Study Transfer Plan (HWTP):

#### Universities with a HWTP



#### Location of Universities with a HWTP



**HWTPs have been adopted where there is a Mobility Manager**

**HWTPs are very few ... and very few are available**

**Among Universities with more than 40,000 students (called «MEGA Atenei»), only 3 have called for a HWTP (1 in the North, 1 in the Centre, 1 in the South)**





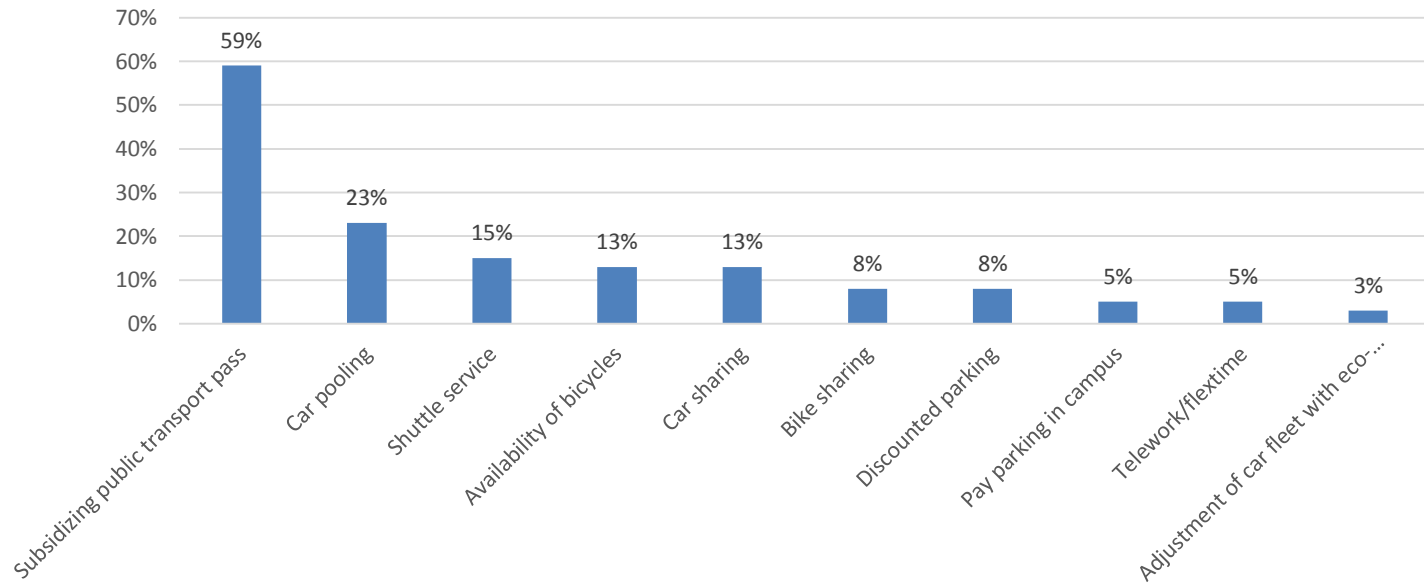
## Preliminary Survey: Results (3)

### Actions:

In Universities lacking a Mobility Manager, specific actions were taken to favour a more sustainable access to the campus by employees and students



Actions taken by participating Universities



## Preliminary Survey: Results (4)

### Conclusions:

- The Mobility Manager is quite a spread figure in the Italian University system;
- Few Universities adopt a HWTP;
- A lot of initiatives are taken despite the lack of a formal HWTP;
- Advertising campaigns and actions, often very creative and original, are carried out for sustainable transport
- There is little consideration for remote work and «lavoro agile»;
- Mobility Managers are required a specific training

About 50% of CRUI Universities are members of the **Rete delle Università per la Sostenibilità – RUS** → **Formalization of CNMMU as a «Tavolo Mobilità» is under way**

About 10% of CRUI Universities are members of the **International Sustainable Campus Network (ISCN)**, where sustainable mobility is a topic and a specific target of WG2: «*Campus-wide planning and target setting*»

**A lot of work for the CNMMU and .. for all!**



## What is Politecnico di Milano doing ?

**BIKE CHALLENGE MILANO 2015**  
 19 settembre - 20 ottobre

MAGGIORE % DI PARTECIPAZIONE  
 3° CLASSIFICATO  
 Organizzazioni con > 500 lavoratori  
 Politecnico di Milano

**green move**  
 ELETTRICO, APERTO,  
 CONDIVISO, VICINO

**VENTO**  
 BUON 2016, BUON INIZIO DI RIVOLUZIONE  
 LEGGERA A COLPI DI PEDALE E PRESAGGIO!

**CITTÀ STUDI**  
 CAMPUS SOSTENIBILE

**PRO-E-BIKE**  
 promoting-electric-bike-delivery

**POLITECNICO MILANO 1863**

UNIVERSITÀ DEGLI STUDI DI ROMA TRE

## E- GO Car Sharing ENEL - ROMA TRE

- Started in April 2016:
  - five years project – three stages:
    - first stage: service planning, infrastructural implementation, financial feasibility and demand analysis.
    - second stage: supervision of the starting phase and effective users response;
    - third stage: opening of the service to a wider area of Rome
  - Designed as a “one way” car sharing:



20 Renault Twizy  
2 seats, life 60 Km



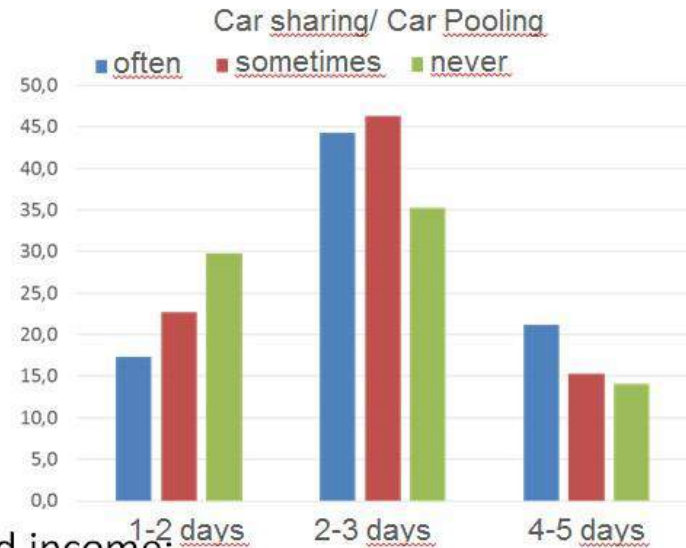
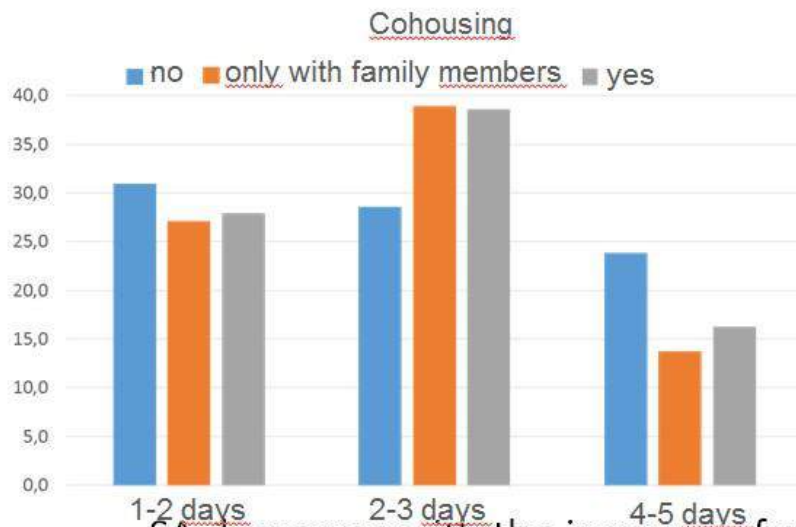
27 recharge st. in University  
15 in the city near main  
attraction points/transit  
stations



10 Renault Zoe  
4 seats, life 180 Km

# Sharing attitude

- Cohousing and car sharing – car pooling use:



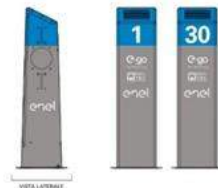
- SA decreases with the increase of age and income;
- Males are slightly more opened to share goods and services than females from our sample (respectively 60% full sharing attitude and 47% full sharing attitude);
- Green Attitude and SA are positively correlated.

## E- GO CAR SHARING NOW

- ❑ Pilot test: from **mid-September 2016 to December 2016**:
  - ❑ 100 users resulted available from the *ex-ante* survey involved in using the service for free.
- ❑ **From January 2017** the service is **free floating**:
  - ❑ the fee is **0,20 €/min (Twizy); 0,23 €/min (Zoe)**
  - ❑ Students that end their trips in a **recharge station** gain **free minutes** benefit
  - ❑ counts for **400 members** and the following Infrastructures:



**20 Renault Twizy**  
2 seats, life 60 Km



**27 recharge st. in Campus**  
**100 in the city**



**10 Renault Zoe**  
4 seats, life 180 Km



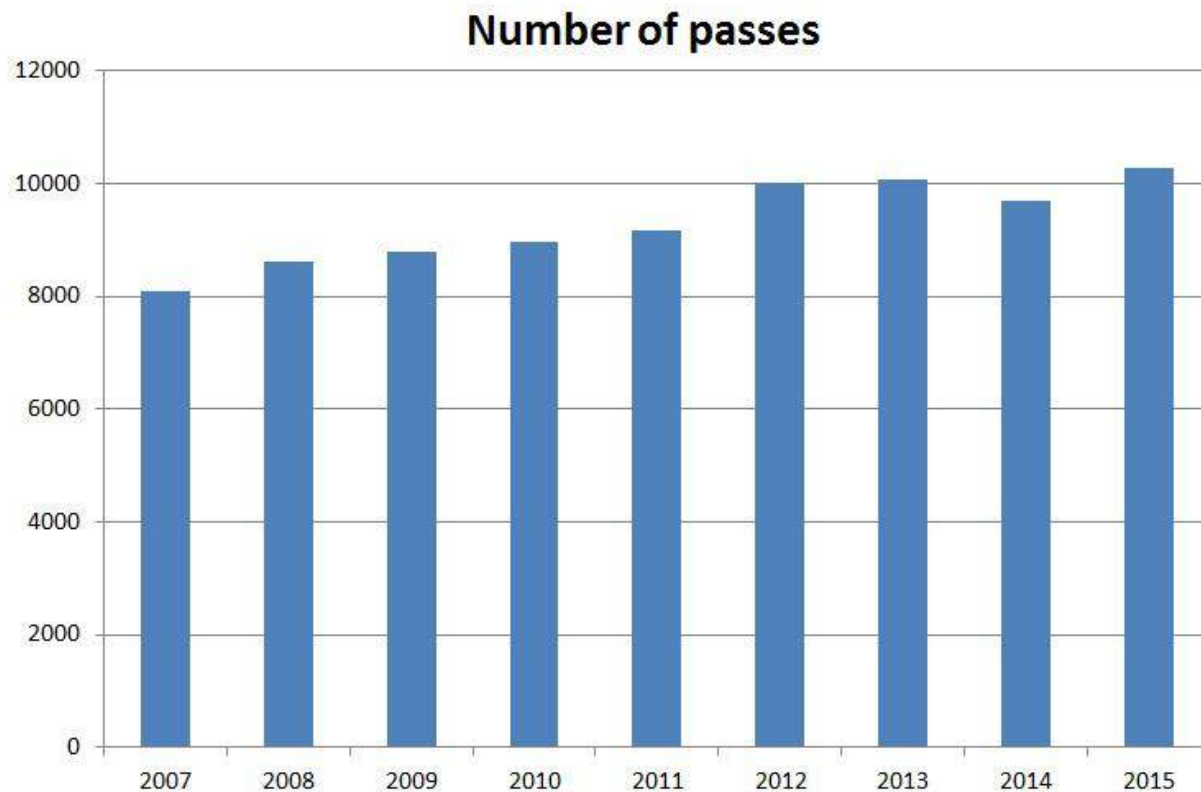
## UNIVERSITÀ DEGLI STUDI DI PAVIA Università di Pavia and Local public transport

### **AFFORDABLE TRANSPORTS**

- Agreement with TPL LINE SpA and Pavia's Municipality for a student UNIPASS Bus at a special rate
- The University funds through students' contribution about 80% of the expenses. Students only pay a yearly pass at the flat rate of € 13,00



## Data on UNIPASS Bus







UNIVERSITÀ DEGLI STUDI DI CAGLIARI

## CITTADELLA MOBILITY STYLES

**Where:** Cittadella Universitaria and Policlinico Universitario di Monserrato (Cagliari)  
(~10.000 people)

**Target:** Drivers that could potentially become Metro users for their home-work/study transfer

1. Advertising campaign to promote the use of the Metro to reach the Cittadella Universitaria (University Campus)

2. Mapping of car transfers and delivery of a Personalized Travelsplan assessing the benefits from Metro potential use



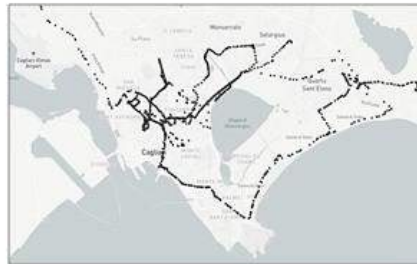
3. Comparison between before and after the delivery of the Personalized Travelsplan



# Persuasive Technologies

## IPET (Individual Personal Ecotravel Technology)

App developed by CRiMM to design personal travel solutions alternative to private car through the use of smartphones.



Mapping (through app and GPS) the home-work/study transfer towards the Faculty of Engineering of a sample of students for 1 week.



Simulation of the sustainable alternative choice and delivery via app of the Personalized Travelsplan (PTP).

### Persuasione attraverso la gamification

- Classifica e premi
- Badge
- Barra di riempimento
- Messaggi Persuasivi



Mapping (through app) the home-work/study transfer towards the Faculty of Engineering of the sample students during 1 week after PTP

# Playcar – Car Sharing in Cagliari



**USA L'AUTO,  
POI DIMENTICALA.**

Finalmente anche a Cagliari puoi scegliere di avere un'auto dicendo addio a tutti i suoi costi fissi

**USE THE CAR, THEN FORGET ABOUT IT**

**Reduced rates for University students**



PIANO  
MENSILE MIN. 12 MESI

**UNI**

**€0.99/h**

€0.30/km

**ABBONAMENTO:** 7.99€ MESE     **STUDENT PASS** 7.99/MONTH

Il piano di Playcar per tutti gli studenti universitari! tariffe ultra vantaggiose e assoluta libertà di utilizzo!  
Un'opportunità imperdibile specialmente per gli studenti fuori sede!

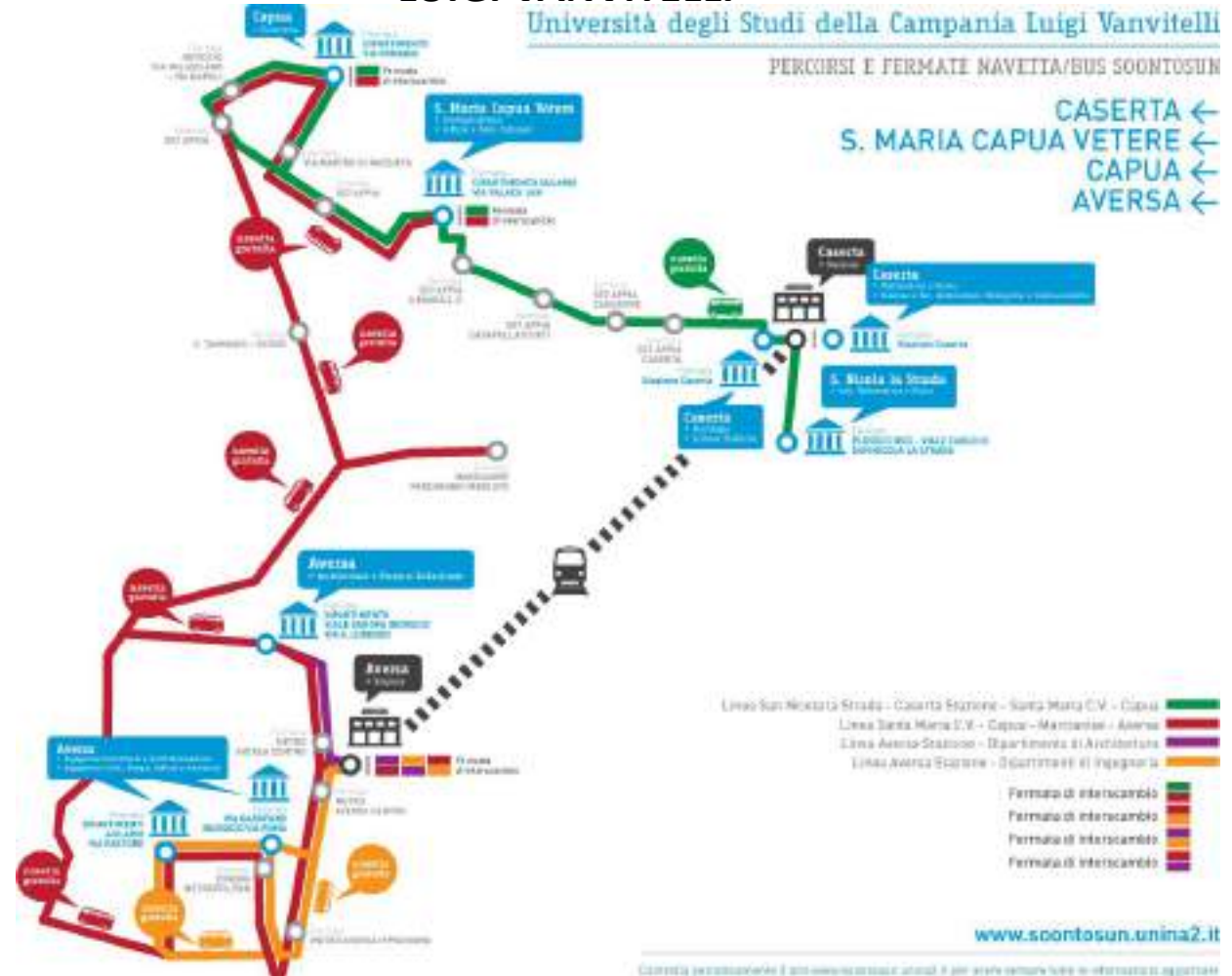
## University Express (CTM, 2015)

The screenshot displays the CTM website interface. At the top left is the CTM logo and the text 'CTM spa' with the date 'mercoledì 26 ottobre 2016'. A navigation bar includes 'HOME', 'LINEE', 'FREQUENZE', and 'PUNTI DI INTERESSE'. The main content area features a map titled 'Linea University Express' showing a yellow route through Cagliari. A sidebar on the left lists various services and information. On the right, there is a blue banner for 'NUOVE TARIFFE E ABBONAMENTI' and a section for 'Muoversi in Bus' with icons for the CTM app, ticket sales, and proxy cards.

### A new link between Cagliari CENTRE– Cittadella Universitaria



## UNIVERSITÀ DEGLI STUDI DELLA CAMPANIA LUIGI VANVITELLI



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LIFE project number LIFE15 GIC/ES/000056 This Project is funded by the European Union. It reflects only the author's view and the agency is not responsible for any use that may be made of the information it contains.

Num. bus	Veicolo	dal 15/09 al 15/12		dal 15/01 al 15/06	
		Mattino	Pomeriggio	Mattino	Pomeriggio
1	Autobus urbano 1	Linea 1: Aversa Architettura		Linea 1: Aversa Architettura	
2	Autobus urbano 2	Linea 2: Aversa Ingegneria		Linea 2: Aversa Ingegneria	
3	Autobus urbano 3	Linea 3: Aversa Ingegneria	Linea 4: Caserta matematica e fisica	Linea 3: Aversa Ingegneria	
4	Autobus extraurbano 1	Linea 5: Caserta – SMCV - Capua		Linea 5: Caserta – SMCV - Capua	
5	Autobus extraurbano 2				

Linea	corse/giorno	km/giorno	€/giorno	giorni esercizio	km/anno	€/anno	€/2 anni
Linea 1: Aversa Architettura	16	88	194	150	13.200	29.040	58.080
Linea 2: Aversa Ingegneria annuale	16	80	176	150	12.000	26.400	52.800
Linea 3: Aversa Ingegneria dal 15/01–15/06	13	65	143	93	6.045	13.299	26.598
Linea 3: Aversa Ingegneria dal 15/09–15/12	4	20	44	57	1.140	2.508	5.016
Linea 4: Caserta matematica e fisica dal 15/09–15/12	13	75	166	57	4.298	9.455	18.910
Linea 5: Caserta – SMCV - Capua	11	286	629	150	42.900	94.380	188.760
<b>Totale</b>	<b>73</b>	<b>614</b>	<b>1.352</b>	<b>657</b>	<b>79.583</b>	<b>175.082</b>	<b>350.164</b>

## Linea 1: Aversa Architettura



**FERMATE**

-  SUN Architettura
-  Stazione Aversa Centro
-  Stazione RFI

Percorso Linea e orario partenze bus

Orario di partenza da stazione RFI	
id.	ora
1	08:30
2	09:00
3	09:30
4	10:00
Orario di partenza da Architettura (via S. Lorenzo)	
5	13:00
6	13:30
7	14:00
8	14:30
9	15:00
10	15:30
11	16:00
12	16:30
13	17:00
14	17:30
15	18:00
16	18:30



## Linea 2: Aversa Ingegneria

**FERMATE**

-  SUN Ingegneria
-  Stazione Aversa Centro
-  Stazione RFI



Orario di partenza da stazione RFI	
id.	ora
1	08:30
2	09:00
3	09:30
4	10:00
Orario di partenza da Ingegneria (viale Michelangelo)	
5	13:00
6	13:30
7	14:00
8	14:30
9	15:00
10	15:30
11	16:00
12	16:30

**Percorso Linea e orario partenze bus**

## UNIVERSITÀ DEGLI STUDI DI BRESCIA

*Purchase of 200 bicycles to give on a gratuitous loan to non resident students*



## UNIVERSITA' DEGLI STUDI DI BRESCIA

### *Build a bicycle maintenance shop and new bicycle parking*

The **BICYCLE MAINTENANCE SHOP** is located in Via Branze, 38 close to the Faculty of Engineering



**More bicycle and a new covered bicycle rack**

