

University
University of Catania (UNICT)
Country
Italy

Location



Size

Mobility Organizational Structure







To reduce car dependency and its relevant impacts in a highly congested city. To provide an affordable and sustainable commuting access to university by public transport to all the students in the city of Catania.



### Background

Catania is a medium-sized city (300.000 inhabitants) located in the eastern part of Sicily (Italy) (Figure 1). Its transport system suffers from critical issues including road traffic congestion, low public transit ridership, little diffusion of cycling and walking for systematic trips, and high levels of fuel consumption and greenhouse gas emissions per capita. It is one of the Italian cities with the highest rates of motorization, recording 70 circulating private cars per each 100 inhabitants in 2017.

Catania can be considered a "student city", with one of the oldest Universities in Italy (UNICT was founded in 1434), which counts about 40.000 students, 1.000 professors and researchers and 1.000 staff, 17 departments, 100 degree courses, 18 PhD courses, 20 master, 600 Erasmus agreements. MoMACT (Mobility Management at the UNICT) is the office that promotes the culture of sustainable mobility among students and employees and promotes alternative solutions to private car for home-university travel. It is headed by the Rector Deputy for the Mobility Management, which operates in strict cooperation with municipality managers and urban transport operators.

One of UNICT missions is to increase the accessibility of University sites by public transport.

To this purpose, UNICT cooperated with the Municipality of Catania for the design and implementation of the first BRT line (Figure 2) serving the campus located in the northern part of the city (http://www.specialeu.org/knowledge-pool/module-4-implementation-of-sustainable-planning/mobility/good-practice-example-1-the-first-bus-rapid-transit-brt-line-catania-italy), (https://vimeo.com/62423316). It started its service in 2013. Today it is the most used bus line by students (we record a maximum flow of 700 students per hour in the peak hour).

In 2017, a new metro station opened near a high-demand district, including the abovementioned campus, other University sites, health-care services and a park-and-ride facility serving the University dwellers and residents, though hardly accessible due to a high slope and poor pedestrian infrastructures. UNICT, the municipality of Catania and the metro company operator made an agreement to cover the last mile by a Metro Shuttle bus service (Figure 3 and Figure 4). It runs every 10 minutes in coordination with the metro. Today, 3.600 students everyday use the combination Metro + Metro Shuttle to reach the university destinations.



2018



### Description

In October 2018, the last and most important effort of UNICT so far was to allow free transit access for all the 40.000 students to all urban public transport (50 bus lines, 1 metro line, 1 metro shuttle service and 3 park-and-ride facilities), both weekdays and weekends. It is the first step for UNICT to show its concrete engagement to adhere to UN Agenda 2030 objectives for Sustainable Development. PhD students, Erasmus students and trainee doctors are also included in the programme (Figure 6).

The right to access high education at UNICT now encompasses access to sustainable and affordable mobility. Catania is becoming a real "UniverCity", while students' welfare and city's liveability greatly increase.

This is a totally new way of promoting public transport among students. We are not contributing for the seasonal ticket of students who want to use it. We are making public transport free for all students who are regularly enrolled, as essential part of their right to study. In this respect, it should be considered as a social strategy, in addition to a transport strategy contributing to reducing emissions, pollution and congestion.

No university in Italy has taken such an initiative, as far as we know.

A joint technical committee with members of UNICT and transport companies has been

established to monitor student ridership and satisfaction and to address substantial changes towards a continuous quality improvement of the transit service.

Currently, students use a temporary pass, both to access public transport and park-and-ride facilities. It has the identification details and a QR code which allows ticket control staff to easily access by a smartphone application a database located at the University, containing the updated list of students who have right to the service (Figure 8).

In the next weeks, students will be provided with an innovative multi-service smart card (Figure 9), tailored on the technical requirements of UNICT to include different features (https://www.unict.it/servizi/carta-dello-studente), i.e.:

- Direct opening of the metro turnstiles of the park-and-ride barriers
- Student identification by the bus staff
- Recording of class attendance
- Dispensing of water from micro-filtered water fountains
- Loaning of books at the library
- Free access to university sport centre
- Fare reduction to cultural events

It can be used also for banking services as prepaid card and money transfer, such as university grant or tax payments.



#### **Indicators**

The most important indicator is mode share, with an increase of public transport share to access university destinations from 27% of 2016 to 46% of 2019, and a reduction of private vehicle share from 50% to 26%. All citizens of Catania - and the environment as well – will benefit for this car ridership reduction (Figure 10).



### Results

The initiative has been awarded as best practice for urban sustainability at the Ecomondo expo organized by Legambiente for the green and circular economy, in Rimini, Italy, 2018 Nov. 9th (Figure 11).

The two most important Italian newspapers "Corriere della sera" and "La Repubblica" reported the news on the initiative (Figure 12), which is also included in the website of the National Ministry for Transport (http://www.mit.gov.it/index.php/comunicazione/news/tpl/la-mobilita-sostenibile-diventa-diritto-allo-studio).



#### Expense & Financing

UNICT totally supports the initiative with an amount of  $5 \, \text{M} \in \text{On}$  the University budget. The transport operators made a strong break on the price of the annual season ticket, which is compensated by an assured income.



2018

## Findings

Educating the next generation for sustainable mobility is the real goal. Students are encouraged to leave their private vehicles and find opportunities to socialize while travelling to and from universities, and also for leisure purposes. They will be the professional and decision-makers of the future and this experience will be transferred to new generations. High connections by social network multiply the effect.

A crucial factor for the definition and implementation of these initiatives has been an intense work of stakeholder engagement, where UNICT has often assumed the role of facilitator for the involvement of decision-makers and mobility actors with respect to the requests coming from the active social responsibility for sustainable mobility.

### Pictures





Fig. 1. Catania from the satellite (left) and its historical centre (right).





Fig. 2. Students get off the BRT line to go the university campus.





Fig. 3. Metro Shuttle: terminal at the metro station MILO (left); park-and-ride (right).





Fig. 4. Metro Shuttle: students get on board (left); the metro route in red and the shuttle route in yellow (right).



### Pictures



Fig. 5. Metro Shuttle route connects a park-and-ride facility, property of UNICT, made available for all citizens to access the city centre by the combination of the Metro Shuttle line and the metro line.





Fig. 6. Free access to public transport: a metro turnstile has been reserved for students in each station.





Fig. 7. People get off board at the Stesicoro metro station (left); a lot of students crowds the metro trains (right).













Fig. 8. Temporary pass for transit (left) and park-and-ride access (right).

## Pictures





Fig. 9. Multiservice smart card (left) - last checks before distributiung the card to students (right).

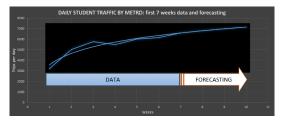


Fig. 10. Daily traffic of students by metro after the initiative: data and forecasting.





Fig. 11. Ecomondo Expo Award as best practice for urban sustainability.



Fig. 12. The news is reported on the two most important national newspaper







- https://www.facebook.com/circumetnea. metro/videos/218382928958203/
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