



The Termini and Piazza dei Cinquecento Hub, Rome

A mobility project for urban regeneration

Designing sustainable mobility

NET Engineering's role in urban regeneration projects is to **offer design solutions with a wide interpretation of sustainability, starting first and foremost from the understanding and interpretation of mobility needs, translating them into new transport infrastructure projects that aren't just about accessibility and usability of the area concerned but also reconnect the whole area.**

There will be an important urban and functional redevelopment project, promoted by Gruppo Ferrovie dello Stato Italiane (Italian State Railways Group), involving the Termini and Piazza dei Cinquecento hub, one of the largest intermodal hubs in Italy, and certainly one of the most critical contexts for transport in Rome.

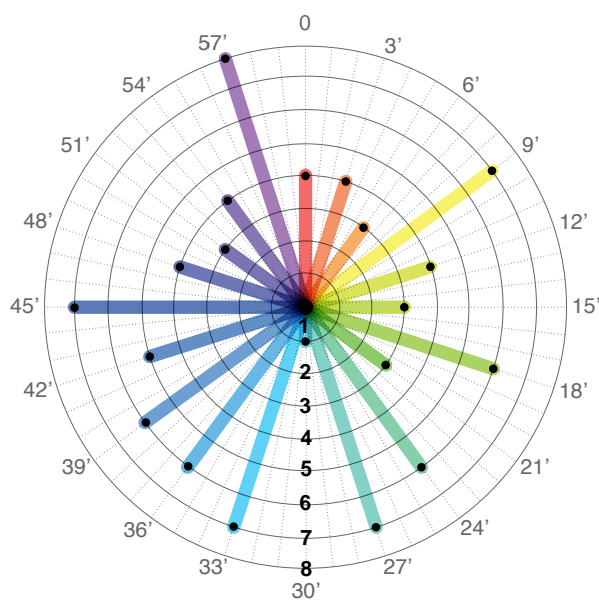
The challenge that NET Engineering faced in the development of the project, winner of the competition announced by Grandi Stazioni Rail and assessed by a jury of experts chaired by Patricia Viel, architect, was to keep the balance between the **functional aspect** while valorising a public space that, starting from the architectural project developed by TVK and IT'S Architettura, returned centrality to the concept of 'empty'.

As transport designers, NET Engineering seized the opportunity to **make the**

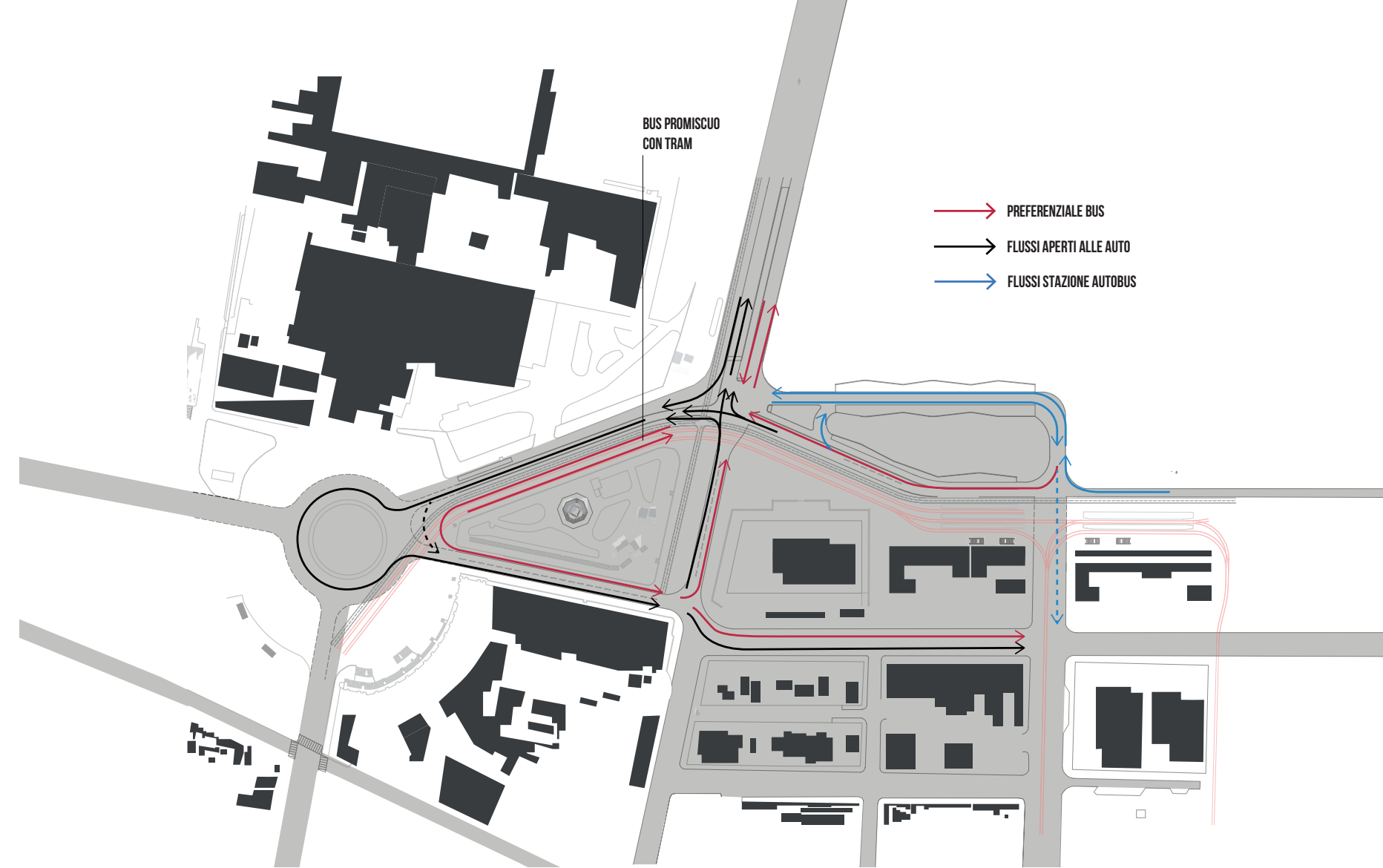
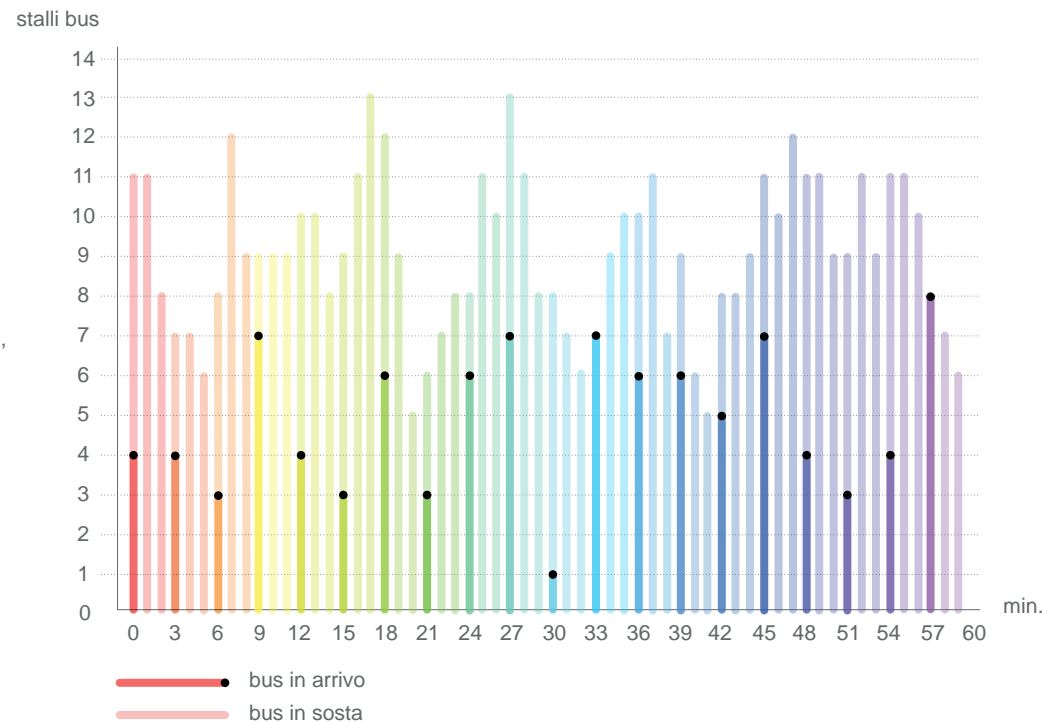
Analysis of bus arrivals (grouping for 3 minutes) and stall occupancy during rush hour minute by minute

1.

MEZZI IN ARRIVO NELL'ORA DI PUNTA



ARRIVI DEI BUS PER OGNI MINUTO
n° stalli occupati contemporaneamente nell'ora di punta



2.

The new layout of the bus terminal and the circulation patterns inside and outside the new bus station in Piazza Cinquecento

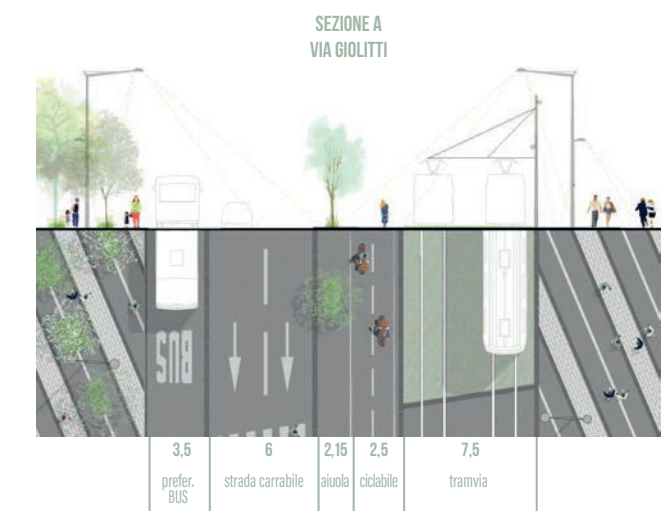
pedestrian the key figure, implementing a process intended to progressively reduce vehicle traffic as it approaches the square, making pedestrian and bike mobility the prevailing and priority methods of the scope of the project.

This vision was translated into persuasive aims for mobility planning which led to the **redesign of the bus terminal** (16 bus lines, with an average of four movements per minute, i.e. a bus arrives or departs about every 15 seconds, converge on Piazza dei Cinquecento, and 13 stalls occupied at the same time during rush hours), a consistent rethinking of the **circulation diagrams, geometry of road sections, integration of the new tram terminals** and a **new cycle path system planned** by the Urban Sustainable Mobility Plan (USMP) that was being designed.

The bus terminal, the functional centre of the square, should be accessible, welcoming, 'legible', functional and favour modal interchange. As a result, a new geometry, at least in Rome, was developed which goes beyond the traditional layout, organised with individual platforms, and uses a concept oriented to the creation of large macro-islands, appropriately profiled to facilitate the entrance and diversion of buses along the perimeter. A concept which turns the vehicle space 'consumed' by the traditional layout into a usable pedestrian area taking



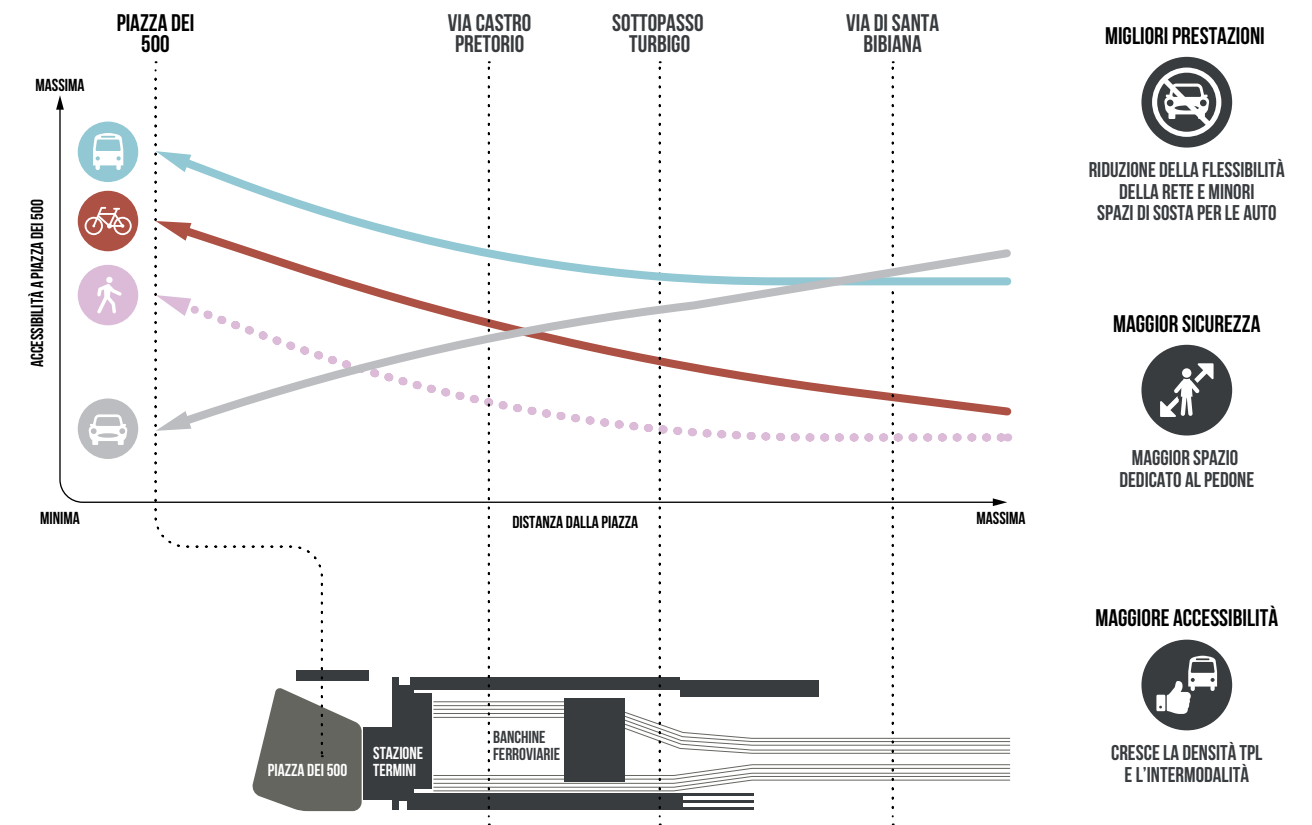
-  PERCORSI PEDONALI
-  TAXI IN ATTESA
-  COLONNINE DI RICARICA
-  CAR SHARING
-  PERCORSI BUS
-  PERCORSO TRAM
-  PERCORSI CICLABILI
-  BIKE SHARING



the pedestrian to the services and making access to the buses simpler and more immediately legible.
 As the result of an overall redesign of the circulation layouts, with the approach to the square from East to West, the side roads Via Giolitti and Via Marsala will become more and more public transport, shared mobility service, taxi, pedestrian and bike oriented. For this, the overall architectural and urbanistic vision is interpreted, for mobility, through the opportune allocation of space for moving and stopping, integrating the planned new tram lines (Termini-Giardinetti and Termini-Vatican-Aurelio) and the bike corridors set out by the USMP, defining the new areas for the taxi rank, kiss&ride and airport shuttle services along Via Giolitti, the car sharing services along Via Marsala with the terminus of the urban bus lines for the districts north of the station.

Square will become a place for pedestrian and bike mobility. It will promote the exchange between buses, tram lines and underground lines via safe paths and clarity on the positioning of the services; it will also offer a cycle hub for safe bike storage.

The mobility study developed by NET Engineering for the Termini and Piazza dei Cinquecento hub substantially succeeded in the aim of availability to the city, interpreting the needs, **integrating the already planned development projects and, in effect, becoming their driver to extend the expected benefits.**



From left: view from Via De Nicola, view from Dinosaurio (main entrance on Piazza dei Cinquecento), view from Palazzo Massimo

3.



4.

Calming of traffic around Piazza 500