# The challenge: tranform the Urban Mobility model to make Milano a more Livable city

Maria Berrini - CEO of AMAT Agency for Mobility, Environment, Territory - City of Milan

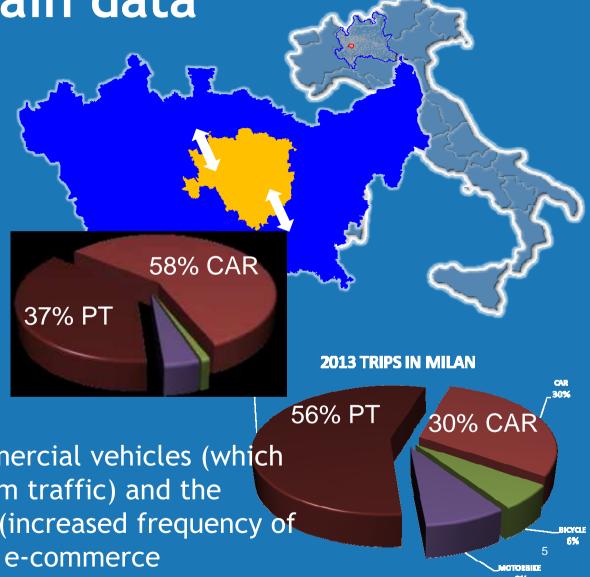






Milan - Mobility main data

- ✓ Inhabitants Milan city: ~ 1.3M; Daily City Users: ~ 1M
- Overall Mobility (trips per day): 5.279.000, of which 2.235.000 between Milano and its urban area, done 58% by car.
- ✓ A more balanced modal split of trips Inside the City (30% by car), but a very high Car ownership: 55/100 inhab.
- ✓ 12% of all trips are generated by commercial vehicles (which contribute to 27% of the emissions from traffic) and the demand for goods mobility is growing (increased frequency of replenishment of stores and spread of e-commerce



## Problems to face, Opportunities to catch:

- Air and noise pollution overcoming EU limit values
- Traffic congestion in the City external accesses roads
- Public spaces occupation for car parking
- versus
- A new Planning season (SUMP)
- Innovative and successfully measures already in place
- Positive trend in mobility styles

# A new Planning season: the SUMP - Sustainable Urban Mobility Plan. Is it the tool to face the main problems?

The SUMP process follows a participatory approach: Citizens, stakeholders, public bodies and institutions, the civil society, a Scientific Committee are contributing to draft the future of sustainable mobility in the city. Milan's SUMP focuses on 10 axes:

- 1. Sustainable Mobility at Metropolitan area scale;
- 2. Public Transport quality and efficiency;
- 3. Integrated Rail system and services;
- 4. Accessibility in new urban development areas;
- 5. Street Safety, Walking and Environmental Zones;

- 6. Cycling as a strategic way to move in the city;
- 7. Parking policies;
- 8. Smart Mobility;
- 9. Urban Freight Logistics;
- 10. City for all, City without Barriers.

# Innovative and successfully measures already in place or under study. Lessons and perspectives?

- PUBLIC TRANSPORT: Underground development, but towards a model more oriented to Intermodality Hubs, Low costs Rapid Bus Services to serve Milan metropolitan area, preferentiation of Tram Lines in urban area.
- ENFORCEMENT AND PRICING POLICIES: AREA C SCHEME to reduce traffic in the city centre; SMART PARKING policies (and fees) to reduce public spaces congestion; URBAN LOGISTIC.
- BIKE and CAR SHARING: a policy to promote more sustainable mobility styles and to reduce car's ownership and public spaces occupation.
- PEDESTRIAN CYCLING AREAS and ZONE 30/km/h: to improve safety and city liveability.

I will present you Milan measures in place in more details, to jointly discuss about results, feasibility, barriers, replicability, perspectives...

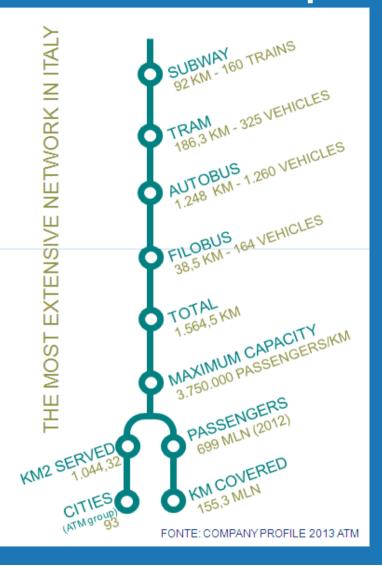
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## Public Transport: Present and next future



M/Underground development (M4, M5, M1) to finalise running projects already funded

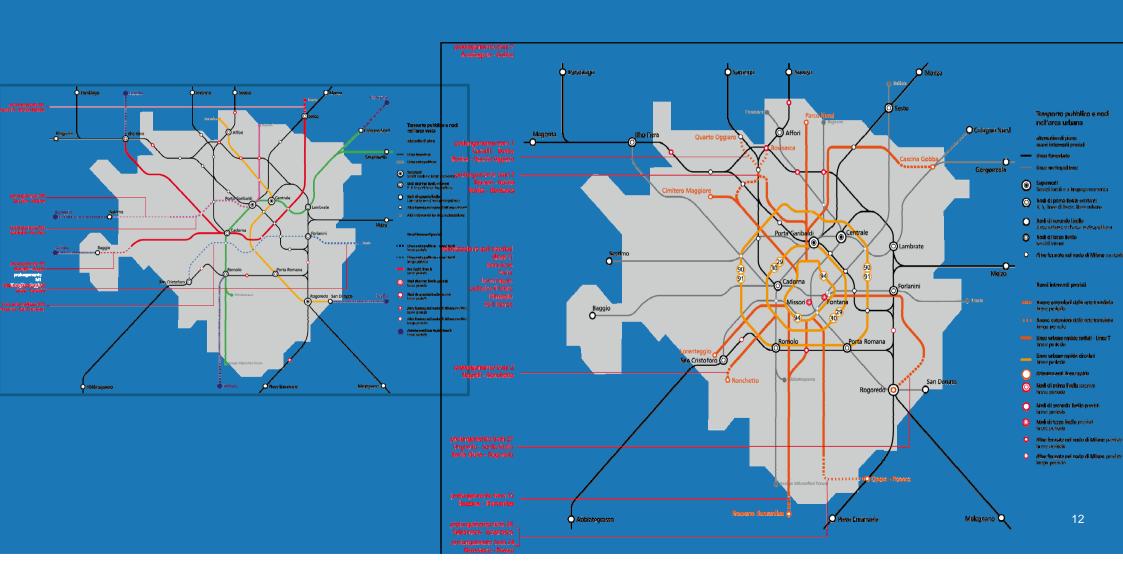
Extension of the protection for the main Filo-Bus circular lane.

Line T Project - Tram priority lines and + Rapid Bus Transit extension out of MI borders

Intermodality -Transport Hubs reorganisation, park&ride -

Smart and for all PT- Infomobility - E-payment - Integrated fees

# Public Transport: Present and next future



# Milan - Congestion charge AREA C



"Area C" is a road pricing measure launched by the Municipality of Milan in order to improve life conditions of those who live, work, study and visit the city. "Area C" is the restricted traffic zone in the center of Milan. The access points, monitored by cameras, are 43, including 7 for exclusive use

of public transport.





The access to the historical center of Milan is limited on Monday, Tuesday, Wednesday and Friday from 7.30 to 19.30, and Thursday from 7.30 to 18.

## Milan - AREA C: features

The system uses a Automatic Number Plate Recognition (ANPR) on images taken by cameras.

#### The fares are:

- All vehicles: 5 €
- Except: Mopeds, motorcycles, electric cars, vehicles for disabled people, vehicles for public utility services, vehicles for public transport services, taxi, hybrid\*, methane powered\*, lpg\* and biofuel\* cars are exempted from the charge. (\*until 2017)
- BANNED: the access in "Area C" is forbidden to "Euro O" petrol vehicles, to "Euro O, 1, 2, 3, diesel vehicles and vehicles with a length of more than 7.5 meters.
- Residents: the first 40 accesses (every year) are free. 41st access onward: 2 € )



# Milan - AREA C: Mobility Results

Daily vehicles entrance in Area C: 92.175

**Reduction - 36.723** (first 24 months compared with 2011 Ecopass, the previous pollution charge Scheme):

Less Traffic: - 28 %

Less Road accidents: - 23.8%

(-26.3 % with injured; out of Area C: 10 - 11 % - 2012 compared with 2011)

Increase of public transport speed during peak hours: +6,9% for buses and +4,1% for tram

Decrease in parking occupation -10% (+10% public spaces available)



## Milan - AREA C: Environmental Results

#### Less pollutant vehicles: - 49%

(-2.400 pollutant vehicles entering every day the Area C)

More cleaner vehicles + 6,1 % (from 9,6% to 16,6% of the total vehicles)

#### Less emissions of pollutants:

Total PM10 -18%; Exhaust PM10 -10%; Ammonia -42%; Nitrogen Oxides -18%; Carbon Dioxide -35%

#### Less Black Carbon (BC):

-52% (Sept) and - 32% (Oct) of BC concentration inside Area C compared to the outside Area C stations.



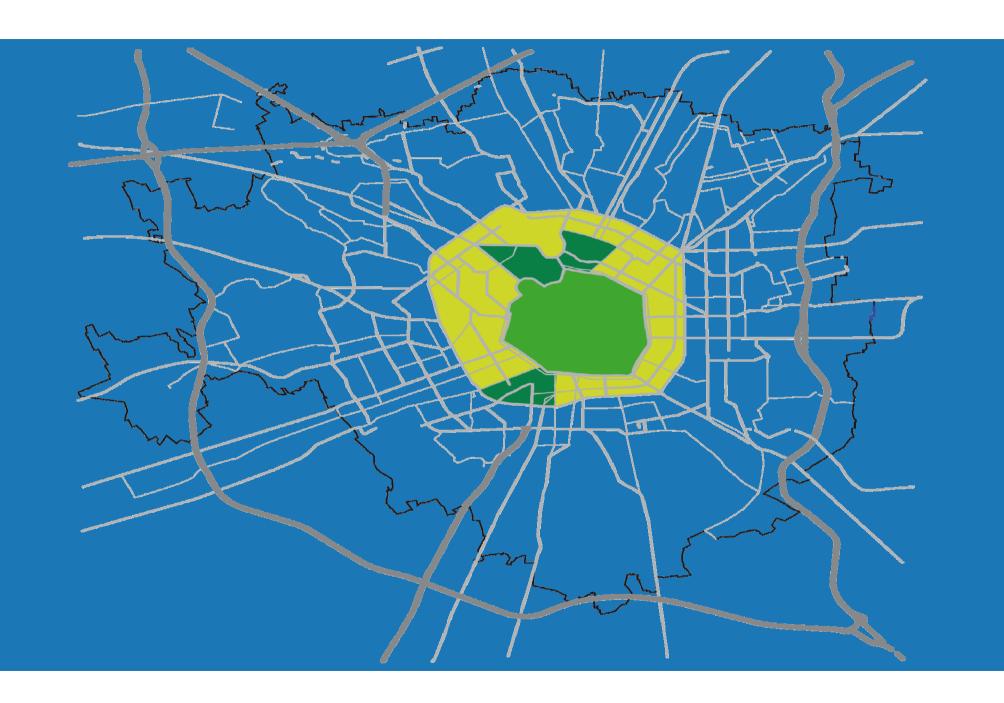
## Milan - AREA C: Incomes

In 2012 all the incomes from Area C have been reinvested in 2013 projects for sustainable mobility:

- 10 million € for the strengthening of public transport in order to improve its frequency
- 3 million € for the development of 2nd phase of bike-sharing system
- 7.3 million € is the cost of IT management access control the software management and authorizations of payment channels

In 2013 the incomes = 29.4 million €. Reinvestment in Public Transport and Sustainable mobility

METTTO TAVOLE PUM ?



## Milan - Car sharing

In 2013, under the spur of the explosion of other systems of sharing (bike-sharing) and on the basis of a study on the potential for development, made by AMAT (Agency for Mobility Environment and Transport), the municipality of Milan launched a public call in order to spread the urban car sharing services.

Several operators answered to the bid.

The total car sharing fleet is currently composed by:

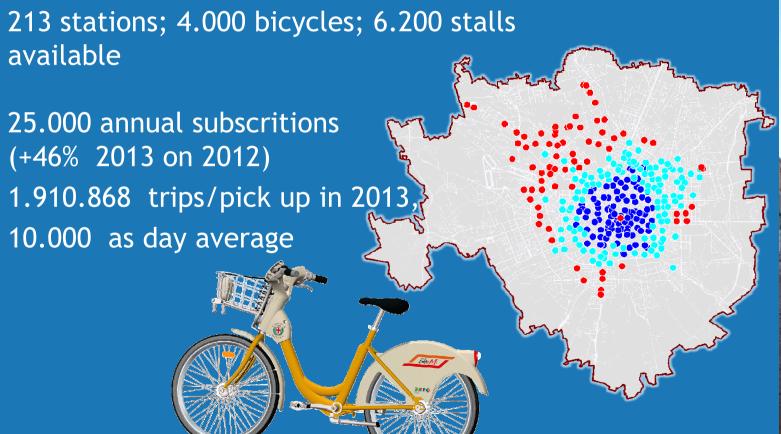
- ✓ Car2go with 798 cars and about 60.000 subscribers;
- ✓ Guidami with 158 cars and 5.542 subscribers;
- ✓Enjoy with 644 cars and 26.000 subscribers (during the first mth);
- ✓e-Vai with 40 electric cars and 18.000 subscribers (with 8 station in Milan);
- ✓EQ Sharing with 120 electric quadricycles (with 15 station activated, that will be 29 by 2014);
- √Twist with 500 vehicles just launched

~100.000 total subcribers for 2.260 vehicles



# Milan - Bike sharing (BikeMI)

Milano among the 5 EU champion cities





# In 2015 - BikeMI + Electric Bikesharing

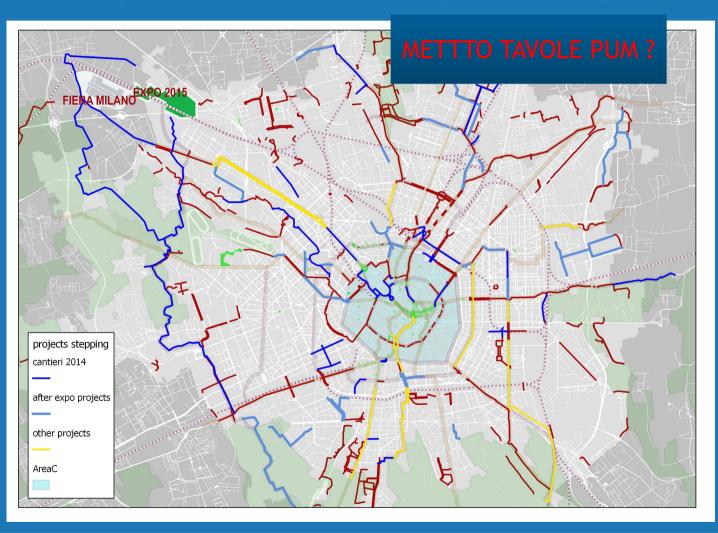
By EXPO 2015: 80 new stations and 1.000 full electric bicycles

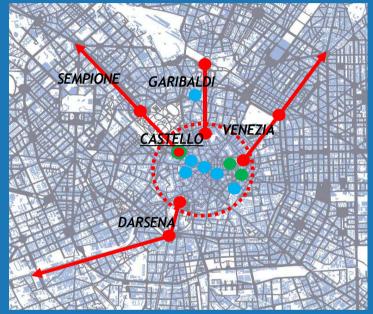
After Expo 2015, the stations will be relocated, in order to improve the current Bikemi Network

The E-system will be integrated with the current BikeMI - Possibility to return traditional and electric bicycles at any BikeMi station - The first in the world of an integrated system of this size



# Integrated walking and cycling network





The connection between the town centre and the main roads:

- Sempione
- Corso Venezia
- Navigli
- •Garibaldi new business district

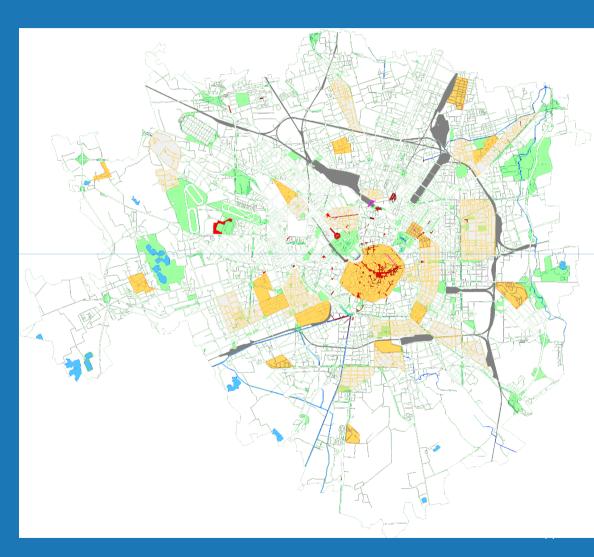
Milan - 30 km/h speed limit zones and

pedestrian areas

The 30 km/h speed limit zones are about 360.000 square meters.

According to the SUMP the 30 km/h speed limit zones will be almost doubled.

**Pedestrian areas** are currently 428,000 square meters + 15.000 of the on going project for the Piazza Castello pedestrian area.













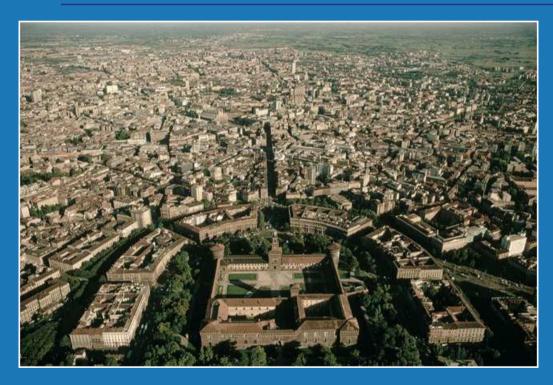






Piazza Castello. 15.000 sqm of a new

pedestrian area

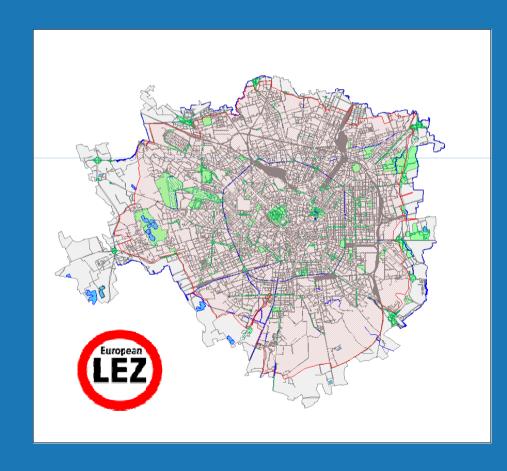




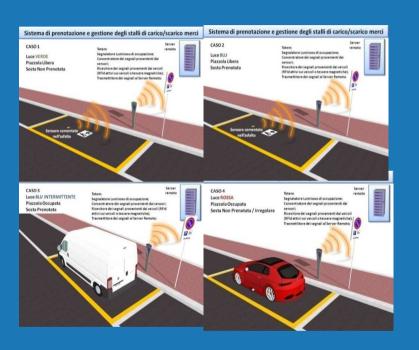
# Urban Freight Logistic. Control and tracking of access for heavy vehicles and for the transport of dangerous goods – Towards Milano Low Emission Zone?

The City of Milan is developing an infrastructure of electronic gates (96) around and next to the municipal boundary.

The systems (cameras and on board units) will be set for the control and management of the most heavy vehicles and the ones used for the transport of dangerous goods. In a second phase it will be targeted to manage also tourist buses and other kind of big vehicles and to disincentive the most polluting vehicles, inspired by experiences such as Greater London LEZ. The definition of the rules will be discussed with main stakeholders and agreed with regional and national authorities.



# Last mile and Load/unload management. Smart technologies? New services? Electric Vehicles?



Technological devices which are able to control and apply sanctions for infringements (in line with the regulations).

Pick-up Pack stations for e-commerce goods.



Electric Vehicles, to deliver in the AREA C



# Thank you Maria Berrini CEO of AMAT maria.berrini@amat-mi.it





