# **Urban Mobility Days 2020**

29 September - 2 October, Online

Shaping sustainable mobility in peripheral districts by looking through the functional urban area planning lens

2 October 2020, 11:30 – 13:00













# **ECCENTRIC**

Urban Mobility Days\_ Interreg CE LOW-CARB, Dynaxibility4CE and CIVITAS ECCENTRIC

Shaping sustainable mobility in peripheral districts by looking through the functional urban area planning lens

**CIVITAS ECCENTRIC:** mobility solutions in Madrid

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Gea21 SL

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2 October 2020

# **CIVITAS ECCENTRIC Project::** Innovative solutions for sustainable mobility of people in *suburban city districts* and emission free freight logistics in *urban centres*.



#### **General outlook**

### The two challenges of the project

#### FIRST CHALLENGE

Sustainable mobility in the peripheries beyond urban centers

#### SECOND CHALLENGE

Clean, fluid and silent goods distribution through city centers











### **CIVITAS ECCENTRIC Project: general outlook**



# A CIVITAS project focusing on sustainable mobility at urban peripheries and last mile logistics

- 5 cities: Madrid, Munich, Stockholm, Turku and Ruse
- Coordinated by the city of Madrid
- Around 100 experts working together on it
- Developed through 51 measures and six work packages
- 5 "Living Labs" to tests measures in real life!
- Clean vehicles, new regulations and services, freight consolidation solutions, MaaS, safe active modes, multimodality.
- Close partnerships with private sector and research
- A new look after COVID19
- Main results and deliverables ready, working on dissemination activities







# **CIVITAS ECCENTRIC Project:** six workpackages and 51 measures



Turku

		Maaria	Mamon	Ruse	Otookiioiiii	rarka	
WP2	Inclusive urban planning and mobility management	2	3	2	2	2	11
WP3	Mobility as a Service for all	1	2	1	1	2	7
WP4	Enabling safe walking and cycling	3	1	2	2	1	9
WP5	Efficient and clean public transport solutions	2	3	2	1	2	10
WP6	Promoting the uptake of clean vehicles	1	1	0	4	1	7
WP7	Towards better and cleaner urban freight logistics	2	2	0	2	1	7
		11	12	7	12	9	51

Madrid

Munich

Ruse

Stockholm









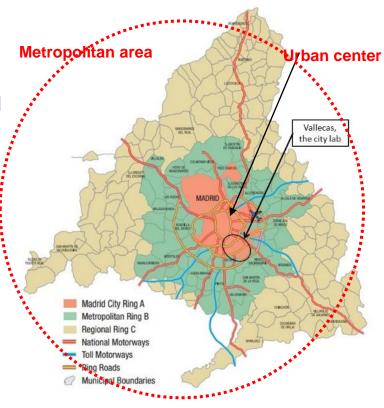


### What are urban peripheries?



#### Urban peripheries: the inner outskirts of the city

- They are the neighborhoods of the city attached to urban centers by their external contour, in which residential use and activities with less added value dominate and, therefore, lower land prices dominate.
- They are served by urban public transport networks.
- Most of the services and equipment are exclusively local.
- The bulk of the displacements are radial in nature, both towards urban centers and towards metropolitan areas,
- Transversal displacement among urban peripheries are usually difficult due to the lack of mobility infrastructures and lack of continuity of streets for walking and cycling



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# At both sides of urban peripheries: urban centers and metropolitan rings



#### **Urban centers**

- Neighborhoods located around the original nuclei of the cities
- They concentrate most of the urban services and facilities at the service of the entire city
- There is the greatest diversification and concentration of economic activities with high added value and, consequently, higher land prices.
- They attract a large part of the total urban displacement of the whole city, and even the metropolitan area.

#### **Metropolitan rings**

- The outermost circle of the metropolitan regions
- Generally separated from the properly urban peripheries by areas with a low level of occupation and urbanization.
- Served by radio-concentric motorized road networks and suburban/ commuter transport networks.
- They constitute a heterogeneous reality made up of a great variety of types of urban fabrics (industrial areas, metropolitan facilities, low-density urbanizations, independent high-density urban centers, old rural centers ...) whose main common feature is the range of distances to the peripheries and to urban centers.
- The majority of displacements are radial in nature towards urban centers, crossing urban peripheries

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### Some basic premises about the peripheries



- Periphery is a spatial category that is defined in relation to low connectivity and long distance to central services and resources.
- Both hyperdensity and urban sprawl phenomena occur in the outskirts of the city
- The peripheral areas can be of high or low income level: land prices do not follow a simple center-periphery gradient (there are 'jumps' in prices)
- Mobility problems in low income peripheries are mainly due to lack of public and private investments in infraestructures and facilities and the lack of good initial planning.
- The greater the proximity and diversity of the central services and jobs to the residences, the greater the sustainability of urban spaces in terms of multifunctionality, mix of uses and reduction of mobility needs
- The greater the distance, the greater the speed necessary to access central services in competitive times, and greater fuel consumption and GHG emissions.

# The main challenges for mobility, equity and sustainability in urban peripheries



#### Urban challenges:

- Low income urban peripheries are comparatively monofunctional and poorly connected with central city services.
- Urban density in peripheries is not homogeneous: high density consolidated peripheries go along with low density new development areas, with low synergies among the respective batteries of solutions.
- New development areas have a long period of very low mobility efficiency
- There is a scarcity of public space on peripheral areas to host all the needs related with the new identified priorities.

#### Political challenges:

Investments in central city are more politically profitable than in peripheries

#### Economical challenges:

Low land-prices in urban peripheries contributes to urban sprawl

#### Cultural challenges:

- High speeds and large sizes of vehicles are yet culturally associated to high social status. Collective modes are yet culturally associated to low social status
- Active modes are not yet generally considered as transport modes

# Basic objectives for equity and sustainability in urban peripheries (the whole city as 15' city)



#### Urban planning

- To guarantee mix of uses to reduce commuting: proximity residence-jobsservices, the city of short distances
- To extend urban sustainability and quality to the whole city (total gentrification means no gentrification)
- To create opportunities for both directions' connectivity: to create attractive metropolitan nodes of centrality in the peripheries as economical drivers.

#### Mobility planning

- To offer a rich modal share with high coordination between modes: wise multimodality, including shared and new mobility services
- To establish a clear priorisation with active modes in the top.
- To guarantee the **continuity** of active modes' networks and the integration with PT.

#### Communication planning

 To create awareness about the need of reducing the need of mobility in order to get better accessibility for all

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## The ECCENTRIC peripheral areas: development & consolidation



#### **Development areas**

- Munich
- Turku
- Challenge: How to integrate sustainable mobility in urban planning

#### **Consolidated areas**

- Madrid
- Stockholm
- Ruse
- Challenge: how to redesign public space for sustainable mobility



Turku Munich



Ruse



Madrid

Stockholm

11

Fuenlabrada

#### **ECCENTRIC** in Madrid





Arroyo Culebro



Municipality - 3.166.130

City centre - 1.006.086

Surface: 604,31 (km<sup>2</sup>)

<u>Density</u>: 5,239

(inh./km<sup>2</sup>)

Car ownership rates:

404 (cars/1.000 inh.)

[Reference year: 2014]

The south-east area of the city has lower public transport standards, both in terms of offer and performance operation, poor NMT networks and insufficient connectivity with other peripheral districts. This is coupled with higher unemployment rates and lower average income.

#### **ECCENTRIC** in Madrid

[Source: Juan Azcárate 8th PROJECT GENERAL MEETING / 2020 March 20th]



#### How is Madrid addressing these challenges?

#### General City Strategies

- Plan A for Air Quality and Climate Change: it contains several guidelines related with equity objectives, especially in terms of reduction of motorised mobility and redistribution of accessibility with active modes.
- Pedestrian Mobility Director Plan
- Bicycle Mobility Director Plan
- Urban Regeneration Strategies

#### ECCENTRIC Project

- The whole project is based on the idea of the balance center-periphery
- Some measures are addressing directly this issue:
  - » Mobility management strategies for vulnerable groups and gender issues
  - » Pedestrian friendly public space outside the city centre
  - » Enabling cycling outside the city centre



#### **ECCENTRIC** in Madrid

### **Engagement of stakeholders and citizens**



# Address vulnerable citizens as new target groups for mobility management actions

The combination of P2P intergenerational and co-created campaigns focused on aged people and school students got really good results with 8.5% walking mode trips increment until 75% of senior travels. The approach includes interesting topics as a health, gender, fight anti-loneliness and autonomy.





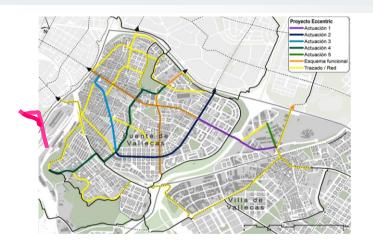




#### **ECCENTRIC** in Madrid

# Redesigning for safe walking and cycling





- Walking & cycling network
- Paseo de los Miradores de Vallecas (The watching points Promenade)







#### **ECCENTRIC** in Madrid

#### **Pilot actions in Vallecas**

CiviTAS
Cleaner and better transport in cities
ECCENTRIC

- Testing of New Signalling System
- New Ordinance Campaign focusing on pedestrians
- Redesign of public square with seniors participation
- New IT tools for managing objective and subjective safety









#### **Conclusions and lessons learnt**



#### **Public space**

 Placemaking: more room for safe active modes, for greening of public space, as well as for shared services, for the revolution of the freight set off by the e-commerce and for the new micromobility. The old distribution of public space has to be replaced by a more people-focused urban landscape fit for a multimodal approach.

#### **Local administration**

 The role of the city administration has been identified as paramount for the management of all the innovative policies, as there is a need to plan and reserve public space for all the demands of the new mobility.

#### **Participation**

 Permanent dialogue with all the stakeholders involved (businesses, research,... but also residents, and specially the vulnerable groups, carers, essential workers), as well as the set-up of permanent partnerships with them.

#### **Conclusions and lessons learnt**



#### **Shared vision**

 It is also necessary to build a shared vision of the future: participation, inclusive approaches and even co-creation are necessary to make possible a change without negative impacts and strong reactions by the people affected by the shift.

#### Management, communication & marketing

 Mobility management, segmented campaigns, even the use of clever marketing and, above all, information and transparency are key issues in all the topics and measures undertaken.

#### **Monitoring & evaluation**

 Innovation requires performance tests and trial and error procedures as well as carefully analysed and evaluated results to be useful for other colleagues with same challenges.

## Thank you!

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