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D 2.3 Implementation Report WP2 Cluster 3: Mobility management

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Abstract

The D.2.3 Implementation Report WP2 Cluster 3: Mobility Management covers the current status of the implemented work on mobility management with a special focus on communication and experimentation of sustainable mobility offers. It is intended to overcome the dual structure of overvalued motorised private transport on the one hand and local public transport and pedestrian and bicycle mobility on the other. Successful mobility management also includes professional marketing that addresses different target groups.

The report describes the implementation status of the measures “Citizen participation via local community portal” in Munich (MUC 2.7), “Mobility Management strategies for vulnerable groups” in Madrid (MAD 2.8) and “Neighborhood oriented marketing of sustainable multimodal mobility services” (MUC 2.9). Furthermore it is also dealing with “Transfer, exchanging ICT technology for everyday mobility between generations” (MUC 2.10) in the City of Munich and “Information, training and awareness raising” (RUS 2.11) in Ruse.

Project Partners

Organisation	Country	Abbreviation
Ayuntamiento de Madrid	Spain	AYTOMADRID
Grupo de Estudios y Alternativas 21 SL	Spain	GEA21
Landeshauptstadt Muenchen	Germany	LHM
Domagkpark Genossenschaft EF	Germany	DOMAGK
Green City EV	Germany	GC
Obshtina Ruse	Bulgaria	RUSEMUN
Club Sustainable Development of Civil Society Association	Bulgaria	CSDCS

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Disclaimer:

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List of Acronyms

ACM	Adaptive City Mobility
API	Application Programme interface
ca	<i>circa</i> (around)
CO ₂	Carbon Dioxide
D	Deliverable
DoA	Description of the Action
DMP	Data Management Plan
EC	European Commission
ECOMM	European Conference on Mobility Management
EU	European Union
EV	Electric Vehicle
e.g.	<i>exempli gratia</i> (for example)
FCEV	Fuel Cell Electric Vehicle
GA	Grant Agreement
H2020	Horizon 2020
HOV	High Occupancy Vehicle
IA	Innovation Actions
i.e.	<i>id est</i> (that is to say)
ICT	Information and Communications Technology
IEE	Intelligent Energy Europe
IHFEM	Integrated Action Program for the Promotion of Electromobility in Munich
IT	Information Technology
KoM	Kick-off Meeting
KPI	Key Performance Indicator
LBG	Liquid Biogas
LDM	Local Dissemination Manager
LEM	Local Evaluation Manager
MaaR	Mobility as a Right
MaaS	Mobility as a Service
MER	Measure Evaluation Report
ML	Measure Leader

MR	Measure Report
MS	Milestone
NGO	Non-Governmental Organization
NOx	Nitrogen Oxides
OCG	Observers City Group
P&R	Park & Ride
P2P	Peer to peer
PAC	Political Advisory Committee
PAG	Political Advisory Group
PDM	Project Dissemination Manager
PER	Process Evaluation Report
PEM	Project Evaluation Manager
PMG	Project Management Group
PT	Public Transport
SM	Site Manager
SUMP	Sustainable Urban Mobility Plan
WP	Work Package
WPL	Work Package Leader
WS	Workshop
WT	Work plan Table

Executive Summary

The mobility management measures in this cluster 2.3 are based on "soft" methods such as information, communication, participation, organisation of services and coordination of the activities of different partners. Mobility management promotes sustainable transport and reduces the demand for car use by changing the attitudes and behaviour of car and motor vehicle users.

The Implementation report summarises the current status of measures MUC 2.7, MAD 2.8, MUC 2.9, MUC 2.10 and RUS 2.11 in Work Package 2. Furthermore, critical challenges and key factors are described which can be used to identify lessons learned for the further implementation phase and replicability or upscaling of the results. The recommendations for further implementation can also serve as guidance for other European cities and for the definition of SUMP, including the groups of people or tools tested in the ECCENTRIC project.

- Measure MUC 2.7 was implemented very quickly and with great engagement. The website is already online and is continuously being updated with new content.
- Measure MAD 2.8 has successfully carried out a large number of activities. Vulnerable groups (older people and children) are the focus of these activities defined in co-creation or Peer2Peer processes. Intergenerational approaches and a gender approach are also taken into account. A specific mobility management strategy will be developed, which will not only work as a soft measure, overall it will also lead to an improvement of access conditions to specific facilities such as schools and care facilities, prioritized by the target groups. The methodology is easily replicable.
- Measure MUC 2.9 is divided into three submeasures. Resident mobility management is currently in the implementation phase and will be rolled out summer 2019. Mobility management for day care facilities and schools is already being implemented by the "Walking Bus". In addition, meetings with educational stakeholders have already been held in order to identify further approaches for measures. Mobility management for companies has already been implemented with "JobRide" project and will be continued.
- Measure MUC 2.10 on training senior citizens in the usability of the Internet and smartphones to facilitate their participation in mobility services is in successful implementation with students and senior citizens.
- Measure RUS 2.11 encourages various actors, stakeholders and users of public transport and mobility services to adopt sustainable mobility habits in order to make walking and cycling safer and a more desirable way of travelling in the neighbourhood and periphery. Particular emphasis focuses on road safety to raise public awareness and reduce the risk of road accidents.

1 Introduction

The EU-funded project CIVITAS ECCENTRIC has set itself the goal of ensuring a better quality of life for citizens while at the same time maintaining complete mobility - without owning a car. In the course of this, a variety of sustainable solutions for the promotion of future-oriented mobility will be implemented and demonstrated in peripheral settlements. One of ECCENTRIC's central tasks is to establish networks with the other five European partner cities and to exchange and transfer knowledge among each other. Each of the model neighbourhoods serves as a Living Laboratory area in which the various measures are scientifically investigated, developed and tested and at the same time the transferability and adaptability to other regions and countries is examined and aimed at. The activities of WP2 are focused on demonstrating and testing new concepts and services in the field of inclusive urban planning, new parking policies and innovative mobility management, which are suited for a more sustainable organisation of mobility.

Cluster	Measure	City	Partner(s)
3. Mobility Management	MUC 2.7	Munich	Domagkpark eG
3. Mobility Management	MAD 2.8	Madrid	AYTOMADRID, GEA 21
3. Mobility Management	MUC 2.9	Munich	LH Muenchen
3. Mobility Management	MUC 2.10	Munich	Green City e.V
3. Mobility management	RUS 2.11	Ruse	CSDCS

Table 1: Cluster measures' table

2 Explanation of the work implemented in WP2 Cluster 3: Mobility management

Mobility Management can have many forms and appeal to many target groups.

- In the measure MUC 2.7, the new community information and participation portal, has a potentially high range in the laboratory area and provides the residents of Domagkpark (Munich Living Lab) with information about the neighbourhood through the already implemented website (<https://www.domagkpark.de/>). In addition to information on upcoming events, the website also points out mobility options in the neighbourhood and activities as part of the CIVITAS ECCENTRIC project.
- Measure MAD 2.8 primarily targets senior and students (vulnerable groups) and makes a decisive contribution to addressing specific target groups. A large number of activities have already been carried out, designed and organized by volunteer groups of senior and schools. There have already been campaigns including video production with a high participatory profile, organised participations of older people in mobility events and fora, the founding of a pedestrian club and the installation of a minute display on the elderly club's hall wall which reveals how long one has to wait for a bus. As a pilot action, the accessibility, benches and pavement of a square have been improved following the needs of senior people. For school students, for example, training activities took place (cycling training, bicycle repair workshops), which were also gender-focused. Many activities were also organised, such as walking buses and bike buses, as well as activities aimed directly at raising awareness of sustainable mobility, such as travelling exhibitions in schools or T-Shirt design competitions with bicycle motifs.
- Measure MUC 2.9 aims to implement measures for residents, children and companies. Currently, information materials and test offers are being developed and prepared, which will be distributed to all residents of the laboratory quarters. The residents can enter into a dialogue that offers information and mobility advice. The measure is expected to be implemented in early summer 2019 and will reach the majority of residents. The residents who will move in later will be reach out to all residents who are registered in the living lab area. The residents who will move in later will be reached in two further dispatch waves.
- Regarding the measures for child care facilities, the “Walking Bus” has been running since the school year 2016/2017.
- In measure MUC 2.9, company mobility management is addressed to the companies in the Parkstadt Schwabing and covers efforts to direct and reduce the traffic they cause. There are different traffic flows that are initiated by the companies and can therefore be controlled by the company. These include trips to and from employees' workplaces and company trips such as business trips. On the one hand, this burden affects the companies themselves and, on the other hand, traffic routes and parking

spaces in the immediate neighbourhood are used as a result of these company-related trips. The company mobility management focuses on a more efficient organization of these journeys and a reduction at the same time. The companies have previously participated in the "Corporate Mobility Management" programme. The cross-company ridesharing scheme "JobRide" has already been implemented for four companies to facilitate more efficient commuting to and from the workplace. The participating companies are already offering their employees an online software solution free of charge, which can be used to find drivers or passengers across companies. The cooperation will be extended by further companies in the future.

- Measure MUC 2.10 brings generations together: pupils are trained to introduce other people to Internet applications via the PC or smartphone with regard to mobility-related issues. Then they train senior citizens to use these media. The measure has already been implemented several times in schools. The further implementation takes place repeatedly in the same loop: Both voluntary schools and senior citizens who want to learn how to use the devices to use mobility services are acquired. Training material has already been developed in advance. Then several sessions will be held in which the students will first be trained to teach others to use the devices. Afterwards they teach the seniors. More than half of all workshops have already been held, eight more will follow until 2020.
- Measure RUS 2.11 includes information, training and awareness activities. A comprehensive stakeholder list with all relevant interest groups has already been worked out, which influences public opinion in the target region and in the entire urban area. The training needs of Ruse's transport professionals were identified through telephone interviews and verification of activities and documents from previous relevant projects. An expert organisation was set up to carry out the planned training courses. A concept of the workshop programme and educational material has been developed. Secondary schools and Elderly people have been motivated to participate in the workshops. The workshop has already taken place six times and will be implemented 10 more times.

2.1 MUC 2.7 Citizen participation via local community portal

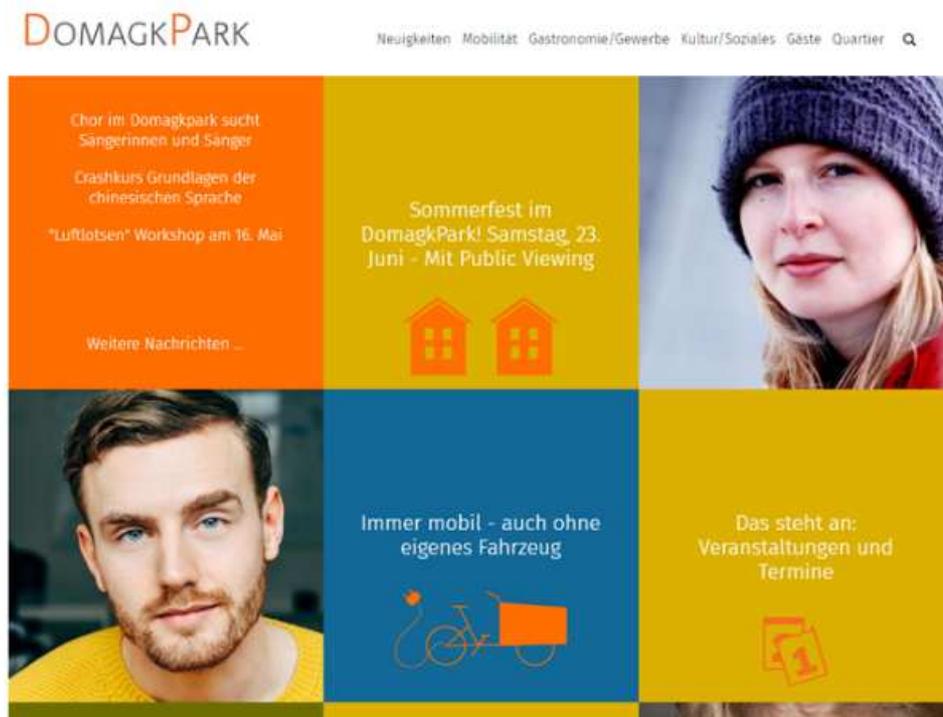


Figure 1: Website Domagkpark

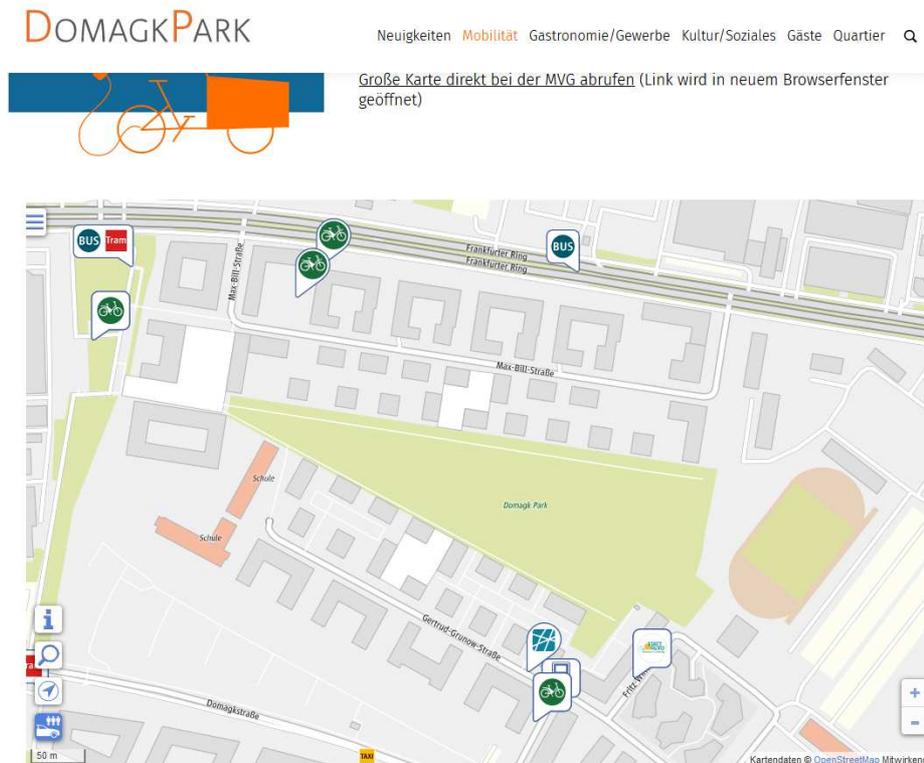


Figure 2: Map of available transport services

The local community portal “domagkpark.de” is an online platform for Domagkpark residents, bundling all information on the residential area’s mobility offers and services as well as related offers in the adjacent neighbourhood. Residents neither had the possibility to gain a comprehensive overview and up-to-date information about the mobility situation in their neighbourhood, nor a platform for discussion and exchange. The new community portal offers one single online hub for the residents with all relevant information about the neighbourhood, mobility services and events. It aims to encourage residents to test existing and new mobility offers in the Domagkpark area and move from “testing new offers” to integrating these into everyday life by turning these into habitual patterns.

2.1.1 Introduction

The community portal provides a central platform for communication and participation in the residential area of Domagkpark and Parkstadt Schwabing. It combines all local mobility-related information about services and booking options, trying to be up-to-date at the best possible rate,

- for the mobility stations and their services
- the concierge system and its services,
- the flexible/shared use of private parking lots,
- special offers for public transport,
- about the multimodal apps of the public transport providers as well as ride sharing opportunities,
- the opportunity of a shared co-working space within the area, and
- information about safe ways to the local elementary school.

The CIVITAS ECCENTRIC project, its measures and the direct involvement of Living Lab residents are illustrated in the portal as well. Through the portal information about various mobility options are centralized and made available to everyone.

2.1.2 Implementation

Key steps

- The implementation of this measure consisted of launching the planned website online. This website is constantly being programmed and developed, e.g. when new features are integrated.

Changes

- There has been a change from the original plan. Actual traffic data could unfortunately not be embedded online.

Stakeholders involved

- The measure is developed in several phases simultaneously, so the planning is never completely finished and runs parallel to the implementation phase. There are ongoing dialogues to expand the content of the website. There is a continuous dialogue with the Munich transport company, the Department of Public Order, Green City and the commercial and cultural operators in the district.

Required infrastructure

- A basic technical equipment consisting of server, computer and Internet connection is required to implement the measure. Furthermore, an open source web software, Contao CMS, is used to set up the website and fill it with content.

Link to other measures

- This measure is intended to publicise other CIVITAS ECCENTRIC measures implemented in the neighbourhood.

Timeframe

- The planning and final implementation of the measure was done in less than one year. But it has to be updated and maintained frequently.

2.1.3 Business model and contractual partnerships

Ownership of the measure

- The measure belongs to Domagkparkgenossenschaft eG, who is the owner of the domain.
- The measure is independent, there are no contracts with other partners. There are relations with partners, but these are informal.

Formal relationship between the public authority and the industry partner

- The initial funding is done by the CIVITAS ECCENTRIC project budget. The operation and maintenance of the website is financed by commercial fees. Commercial partners can use the website for posting own content and services by paying a commercial fee to the website operator.

Financing

- The objective will be to enable the measure to finance itself. In the future, there will also be an active attempt to acquire public funds for the measure.

2.1.4 Critical challenges and success factors

- No challenges appeared during implementation. The measure was implemented with great enthusiasm and ambition.
- An important success factor is the technical functioning of the website and that it is accepted by residents.

2.1.5 Lessons learned from implementation/replicability

- One should no longer rely only on a stationary website, but go parallel into the app development.
- The local content has a limited target group. However, there is a willingness to link the content to a wider context, e.g. the city's website, so that residents can find out about the city's content as well.
- Everything worked very well in the implementation of the measure and deserves to be replicated.

2.1.6 Recommendations

- Politicians should consider that information should be made available to citizens in an easy way, taking into account the new technical possibilities. The population is largely becoming interested in digital information, and nowadays it is less common to obtain information by calling an authority or from leaflets.
- Politicians should also control that data should be more freely accessible, e.g. traffic data. In addition, policy makers should provide money for a measure like this.

2.2 MAD 2.8 Mobility management strategies for vulnerable groups



Figure 3: Students cycling in the Living Lab (Vallecas districts)

2.2.1 Introduction

With this measure, the municipality of Madrid aims at reinforcing the SUMP planning process by developing a participatory process targeted at vulnerable groups (elderly and children), complemented with a gender approach, in order to support decision making and the design of future mobility measures.

Following this bottom-up participatory approach, a specific mobility management strategy has been developed, containing not only detailed information about vulnerable groups needs and communication strategies, but also the results of pilot projects integrating physical improvements in the public space. The methodology has been based on the successful experience of the previous project IEE_STARS, working through an accreditation scheme for schools with a sustainable mobility strategy where peer-to-peer communication is placed at the core. This approach, tested in previous years for children and teenagers, has been adapted and replicated for seniors, working through the municipal social centers, which are really a key space for older people in peripheral neighbourhoods with massive daily attendance.



Figure 4: Founding a senior pedestrian club in the Living Lab

2.2.2 Implementation

Key steps

This measure has been developed through two worklines in parallel: campaigns for sustainable mobility of elderly and campaigns for students in primary and secondary schools

a) Action plan: Activities for senior citizens

- The aim was the co-creation of awareness campaigns to promote inclusive, independent, sustainable and active mobility of the elderly, carried out by themselves and directed to the elderly, in a peer-to-peer (P2P) approach, so to promote sustainable and active mobility among them.
- One objective of the measure is the empowerment and visibility of this wide group of citizens to be active and independent. This objective is fully aligned with the strategy for elder people: Madrid, a friendly city for ageing, one of the main priorities for the current local government policies.
- Another aim, related with the emerging design of public spaces and public transport policies for an ageing society, is to make elderly's needs and conditions visible in the urban space. The idea is to integrate these conditions and need in the review of Madrid SUMP, and in other cities' SUMP via ECCENTRIC conclusions.

- All the social centers for elderly in the Living Lab have been offered to collaborate with the measure team and communication professionals to design campaigns for their peers focused in their active ageing and mobility.
- Five groups of seniors volunteered to co-create the campaigns. They have been working with the measure team to define the topics of their interest, and produced five short humorous videos on the issues relevant to their mobility (as public transport, quality of pavement, adequate benches, accessibility,...). They have promoted these campaigns in events, radio broadcasts, social media, etc... The campaigns are focused on the intergenerational synergy and they seek to break current stereotypes, empowering the elderly and helping them to adopt a proactive attitude.
- The plots of the campaign videos were written collectively with ECCENTRIC students of the nearby schools after several workshops and critical walks, where the diagnosis was built.
- Two physical actions have been implemented as pilot projects coming out of this diagnosis
 - Improvement of a local square (Plaz de la Constitución) according to the diagnose made by elder volunteers: adaptation of benches, ramps, quality of pavement, signalisation, etc.
 - A screen has been installed in the lobby of a senior center with online public transport information about bus timetables to facilitate their mobility

b) Action plan in schools with children and teenagers

- After a general offer to schools for joining the project, two primary schools and three high schools signed a commitment with ECCENTRIC, initiating a process to improve the sustainable mobility of students and workers through P2P campaigns. Action plan was designed by an Environmental Committee with participation of students, teachers and, when possible, families and school staff.
- The city of Madrid, through the ECCENTRIC project:
 - Encourages the action plan defined by the schools through the support of advisors facilitating the process, the organisation of city events and some supporting actions by stakeholders (bike training by municipal Police; health workshops by municipal public health doctors, advisors or facilitators supporting the schools' action plan design and implementation, external experts hired in the training in communication skills...)
 - Carries out sustainable mobility campaigns at each ECCENTRIC school, involving teachers, families, pupils and principals in the activities aiming to achieve active participation of children in increasing sustainable mobility. Campaigns include the organisation of buses with feet, cyclorides, conferences, workshops, exhibitions, massive urban rides to complete a series of more than 200 activities audited at the end of the school year by advisors.
 - Holds yearly training workshops about communication techniques for teenage students in order to build up communication skills, in a P2P approach.
 - Organizes teachers' workshops to support leaders of sustainable mobility in schools, creating a network of active teachers.

- Implements city and neighbourhood massive Bicycle rides with high visibility and high satisfaction of students and schools.

Some measure milestones and accomplishments:

a) Activities for elderly people

2017

- Initial meetings at the Elderly Social Centers in Vallecas (Madrid Living Lab)
- Participatory planning of activities and critical walks in three of them
- Video production of four short films about good practices on the Bus, with volunteers from the drama group in Santa Eugenia and children from Vallecas schools. Public presentation at the European Mobility Week 2017.
- Pilot project 1: Information screen at the Social Centre “Santa Eugenia”, providing real time information of EMT bus lines serving the facility.

2018

- The seniors’ walkers club “*Anda con nosotros*” (*Walk with us*) has been established. It organizes two community walks per week within the neighbourhood. The T-shirt, logo and name of the club was designed by themselves, as well as the organisation of weekly activities. More than one hundred people is participating on its.
- A fifth humorous video “*Chirigota*” addressing the walkability of the Living Lab for older people, discussing a variety of walking mobility challenges.
- Celebration of the Elderly Day with Vallecas elders groups, making an *opinion workshop in the street* about pedestrian senior mobility.
- Pilot project 2: Renovation works to improve one local square (Plaza de la Constitución) in the Living Lab as a pilot project.
- Active participation in European Mobility Week big events in the city (EMW 2017 and 2018, Bicycle Holland Day 2017 and 18).
- Academic reflection on elderly mobility in the National Congress of Environment 2018 (CONAMA 2018). Setting up of a working group on this topic to be developed along 2019 and 2020.
- The elderly campaigns have been awarded the ‘Muevete Verde’ (Move Green) Award, the main distinction in Madrid mobility management.

b) Activities for children and teenagers:

More than 200 activities have been organised by the “school committees” in seven schools, including students, teachers, and families. Gender differences in the use of bicycles by teenagers have also been addressed.

Some particular measure milestones:

- Launching of activities at European Mobility Week EMW 2016. Massive cycle ride of schools at EMW 2017 and 2018 (in 2018 amounting to 1,100 participants).
- Parking day at EMW 2018. Occupation of car parking to point out the excessive space taken up by parked cars. Students carried out the most

important activity “hunting speed”, in order to demonstrate that the maximum speed limit (50 Kms / h) is not respected

- Yearly Communication techniques and ‘Urbanism and mobility’ workshops for all high school Mobility Ambassadors. They learned how to plan bike-lanes near their schools.
- Cycle rides at the Christmas Parade and at the celebration of Netherland National Day -with the Dutch Ambassador.
- REALE (insurance Company) and UPM (Universidad Politécnica de Madrid/Technical University) donated, respectively, 40 and 30 bicycles to the schools of Vallecas.
- Dissemination of communication campaigns, T-shirt design, video and photo contests
- Two special Radio programmes on M21 and participation in the main national radio channels (La Ser and COPE)
- Bike ride “We want to go to school on bike” organized by Pedalibre Asociation and addressed to families of the project.
- Workshop given by specialists in ephemeral architecture to build bike parks in schools’ playgrounds with recycled materials
- Bike Ride around Vallecas to celebrate the World Environment Day. More than 400 students participating in it. T-shirts of the winning design of the contest (primary and high schools) and diplomas were distributed to the champions and ambassadors (promoters of sustainable mobility).
- The mobility ambassadors and elderly people presented their mobility videos at the Madrid Teen agers Forum
- Evaluation Workshop with teachers on primary and high schools.
- Collaboration with elderly people in the humorous videos creation and recording.
- Dissemination of the project achievements in several national conferences (ESENRED network, STARS España, CENEAM training, ...)
- Presentation of measures in the neighbourhood participatory fora and events.
- Audits on schools made by the advisors at the end of every school year.

What changes and why?

- There are no significant changes in all two submeasures, as the initial hypothesis have been confirmed in the preparation and implementation phases.
- In the preparation phase, some of the detailed proposals explored in the Measure planning document have been discarded, attending the priorities of volunteer groups in the participatory process (traffic alming measures, cycling training...). The measure has been refocused on walking and bus modes.

Stakeholders involved

- Elderly centres and Schools (primary and high) as target groups have been actively involved.

- "Educar hoy para un Madrid más sostenible" (Educating today for a more sustainable Madrid), a joint venture subcontracted by Madrid City to assess and support the schools activities.
- "Madrid Salud" (Health Department) and local Police are two Madrid city departments collaborating actively since the beginning of the measure implementation with many actions (training, workshops, creation of participatory groups...)
- EMT (Empresa Municipal de Transporte), partner of ECCENTRIC in charge of bus management in Madrid, has been a key stakeholder in the production of campaigns and in the pilot project.
- The Departments of Social Services (senior citizens) and Equality have supported the measure implementation and will be involved as multipliers in the demonstration phase.
- The Green Areas Dpt. has collaborated in the project and the works of the pilot project in the Plaza de la Constitución improvement with age-friendly criteria.
- Fundación CONAMA meeting (organisers of the National Congress of Environment) has collaborated with ECCENTRIC in the activities organised in the last Congress both with students and elderly.

Supporting actions

- Cooperation with the central government to build up a Spanish network of cities with sustainable mobility strategies in schools. This network meets once a year for a two-day conference to exchange experiences on active school mobility.
- Another important network is ESENRED, which has set up a forum and is also nationally oriented and meets annually to exchange experiences and reflect on environmental education in schools.
- Some new bottom-up campaigns designed and related to public space needs for a more active mobility have been financed by Madrid Environmental Education Dpt. They will be developed along 2019.

Required infrastructure

- The measure does not need a specific infrastructure of its own.

Link to other measures

Measure MAD 2.8 is linked to other Madrid measures: MAD 4.1, MAD 4.6 and MAD 4.7:

- The target groups (seniors and children/young people) at measure MAD 2.8 need safe and friendly conditions for active means of transport (walking and cycling) as a determining factor of modal behavior change and the success of mobility management campaigns and actions.
- Measure MAD 4.1 focuses on improving safety in this area. MAD 4.6 and MAD 4.7 addresses the walking and cycling improvement of the Living Lab.
- There is also a link with a similar measure, MUC 2.9, where a fruitful exchange took place. Through a collaborative presentation at the CIVITAS Forum 2017, Measure

RUS 2.11 also received suggestions to integrate children and schools into CSDCS campaigns on sustainable mobility.

Timeframe

- The measure will be active along all the duration of the project.

2.2.3 Business model and contractual partnerships

Ownership of the measure

- The measure MAD 2.8 is owned by the local authority and is funded partially by CIVITAS ECCENTRIC. The Environmental Education Department (part of Mobility and Sustainability Area) is responsible for the measure MAD 2.8.
- There is no formal relationship between the public authority and the industry partner, as it is a social based measure.

Financing

- Apart from the ECCENTRIC funds, the City of Madrid pays for an Environmental Education program in which there are more than 100 schools called "Educar hoy para un Madrid más sostenible" (Educating today for a more sustainable Madrid) and endowed with 200,000 euros a year. This program has five modules; one of them is about mobility. The budget for implementation of the program in each school is approximately 2.000,00 euros per year, higher in case of new schools.

2.2.4 Lessons learned from implementation/replicability

Success factors

- The measure has shown that campaigns and cycling training are successfully implemented and appreciated by schools and elderly centers. The new mobility culture has been introduced in these two areas as a relevant issue, schools and social center for elderly.
- Active participation in the diagnose of the neighbourhood through the eyes of the children and teenagers and the elderly is an excellent way to improve the public space for all the citizens.
- The process of co-creation of campaign materials is a way to engage people in the mobility management and empower groups with low visibility in mobility design and planning. Videos and other outputs are of high quality and perfectly suitable for public or technical environments dissemination.
- Training in communication for teenagers, focused on the sustainable mobility, is a good idea to approach teenagers in the discussion of their mobility behaviour.
- The creation of a network of teachers involved in active mobility campaigning is a great support for people that can be isolated in their schools.
- The answer has been really positive, especially with senior people, where the method was innovative in its approach. The fact that the group initiated a walkers club on their own initiative after their collaboration in ECCENTRIC is really relevant regarding the aim of engagement with sustainable mobility, the focus of autonomus and healthy ageing.

- Both campaigns, for students and for elderly people, have raised public and experts interest. Successful dissemination is a proof of this emerging interest in the mobility of vulnerable groups. Local grassroots and NGOs are also really interested in this approach.

Critical challenges

- As all the mobility management campaigns, the impact on modal change is not guaranteed if adequate environment and offer of alternatives do not support the mobility behaviour change.
- In the Living Lab, for example, the lack of a complete safe network of segregated cycle lanes can be the cause of poor impact of the campaigns developed in the schools, despite the will to use the bicycle by the students and the support by the Environmental Education Dpt., the local police, the medical community Dpt (Madrid Salud) etc. In this case, Madrid has placed its priorities in: the Plan A of AirQuality, the Mobility Ordinance focused on walking and the Madrid Central wide Low Emmission Zone in the centre. On the other hand, the planned cycling network has not been produced on time.
- Continuity is important in campaigns aimed to change a deep-rooted culture and long term effects. It is important that the new team agrees to continue with these activities after the upcoming local elections.

2.2.5 Recommendations

- There are two ways to determine the success of mobility management. It is necessary to change the culture of mobility in all the age groups in this transition time. There are qualitative and quantitative results of these campaigns.
- Urban mobility technicians should take in account that the only guarantee of success impact on modal change and continuous progress in behavioural change is to provide the city with cycle paths that really change mobility, as is the case in Spanish cities such as Seville, Zaragoza and Valencia, as well as many European cities.
- Concerning the elderly, taking into account the loneliness which many of them experience, the limited resources they have and the importance of walking for their health, it can be assumed that the establishment of pedestrian clubs, in which people gather every day in groups of 8-10 people to do their daily shopping and walk meets all the requirements of sustainability: ecological, social and economic.
- It is really important to advance simultaneously in the co-creation of campaigns and the pilot projects to show how new mobility transforms the city and to avoid scepticism in the participants. To the new approach, academics and experts should contrast the issues coming from bottom up processes, might guarantee the long term change and wide dissemination to avoid resistance and inertia based on prejudices, especially with vulnerable groups.

2.3 MUC 2.9 Neighbourhood oriented marketing of sustainable multimodal mobility services



Figure 5: Mobility Festival and dialogue with residents

The measure aims to implement neighbourhood-oriented marketing of sustainable, multimodal mobility services in the newly built “Domagkpark” housing area in Munich and the business area “Parkstadt Schwabing”. This residential area will be home to more than 8.000 people as well as schools, educational and other facilities. Various innovative mobility offers and services as well as amenities are present in the neighbourhood. However, people need support in order to achieve a car-independent lifestyle.

2.3.1 Introduction

The measure MUC 2.9 “Neighbourhood oriented marketing of sustainable multimodal mobility services” is divided into three submeasures.

- Measure MUC 2.9 a) will be realized through a dialogue marketing campaign in order to reduce barriers to use alternative mobility services by providing all households with encouraging, target group specific material about the mobility services available in their neighbourhood. This will be supplemented by individual mobility counselling.
- The aim of MUC 2.9 b) is to raise awareness of sustainable mobility in child care facilities and schools. This is done through proven measures that can have a positive effect on a sustainable choice of means of transport. Mobility education and training will be offered to children and their parents (e.g. walking buses, bike repair training,

educational offers on sustainable mobility suitable for children) in order to reduce the number of parents picking up their children by car.

- Furthermore, measure MUC 2.9 c) set the focus on companies located in the business area Parkstadt Schwabing and encourages companies and their employees to reduce car traffic and switch to sustainable means of transport. This is to be achieved, among other solutions, by ridesharing.



Figure 6: Launch of the ride sharing solution JobRide

2.3.2 Implementation

Key steps

a) Direct and dialogue marketing for private households about sustainable mobility

- The concept for the mobility management programme for residents of the Living Lab has been specified in summer 2018. The scheme's framework has been developed including the definition of overall aims, basic and advanced materials, marketing and dialogue processes, data requirements and evaluation.
- The concept is as follows: Residents of the Living Lab receive a welcome package by post sent by the Mayor of the City of Munich. The welcome package contains information about mobility options available to them and a mobility map of their neighbourhood. Residents are encouraged to order additional material based on their individual needs for mobility (e.g. further local materials,

information on cycling, public transport, sharing offers etc.). Residents are also encouraged to experience mobility services that are new to them by ordering special mobility test tickets free of charge. Residents ordering material and/or test tickets will be offered an individual mobility advice session by phone in order to review and plan their mobility for the long-term. The concept has been discussed with residents during the European Mobility Week in September 2018. Feedback has been integrated into the planned scheme. A tender procedure has been carried out for the dialogue and marketing elements of the scheme as well as support in product development and design. The contract has been awarded to a dialogue marketing company with vast experience in mobility management.

- In autumn and winter 2018, the various information products have been planned in detail, local information has been researched and texts have been authored. Based on the ex-ante survey and resident dialogues, mobility needs have been identified. It has then been decided to develop two local information products on topics particularly relevant for residents (leisure activities that can be reached within 15 minutes; and helping residents' visitors to arrive and be mobile during their stay in a sustainable way
- A set of test tickets to be offered to residents has been designed, negotiations with mobility service providers have been carried out.
- Data records of the registration office will be used for the personalised welcome mailing (addresses, registered household member names, etc.). A municipal data protection audit has been carried out and the process for the technical provision of data needed has been initiated.

b) Mobility education and training for children, educators/teachers and parents

- Currently, task b) is still to be classified as part of the planning phase instead of the implementation phase. Since the laboratory quarter is a new building area and the primary school on Bauhausplatz was opened in 2017, measure c) has so far been given priority.
- Until now, the various child care and educational facilities in and around the laboratory area have been identified. Various elements of Munich's "mobility biography" concept will be advertised and implemented in the laboratory quarter. The "mobility biography" includes mobility management schemes for people of different age groups, with particular focus on children and teenagers. The aim is to influence attitudes towards mobility through early awareness raising and to promote a sustainable choice of means of transport.
- Activities such as the encouragement of physical and social skills are to be implemented as part of the "BAMBINI - Moving into the Future" project. The children receive various trainings for mobility education. Parents are involved through a parents' evening and a variety of materials as well as the educators, who carry out the project largely independently. In the near future, "Bambini" will also be contracted for the acquisition and project implementation of child care facilities.

- Since 2016, the "walking bus", a supervised group of children walking to or from school, has been carried out in the living lab. This promotes the health and physical activity of the child. It also ensures a safe way to school and protects the environment.
- In addition, motorised traffic around the school is reduced. The bus consists of five to eight primary school children who are accompanied by an adult (one parent of each child in rotation) on a predetermined route on foot to school. On the routes there are bus stops where children are picked up. All children of the 1st and 2nd grades can take part in the bus with their parents. At the moment, efforts are being made to ensure that the "walking bus" is advertised again in the new school year and accepted by parents and children.
- In order to raise awareness of the upcoming activities in the laboratory quarter, a mobility festival took place on 22 September 2018, which also addressed children.

c) Mobility management for companies

- From October 2016 to July 2017, the Department of Labour and Economic Affairs carried out the programme "Operational Mobility Management" in the Parkstadt Schwabing. Measures to improve employee's mobility were developed with seven companies (FUJITSU Technology Solutions GmbH, MAN Truck & Bus Deutschland GmbH, MAN Truck & Bus AG, OSRAM GmbH, STRABAG AG / Ed. Züblin AG, Tod's Deutschland GmbH and Unify Deutschland GmbH & Co. KG).
- From the programme "Company Mobility Management" the measure for the promotion of ridesharing emerged. The "JobRide" measure was mainly initiated and developed by the Department of Public Order. The purpose was to make it as easy as possible for the companies to get started with the measure and implement it.
- The four companies FUJITSU, MAN Truck & Bus Deutschland, OSRAM and STRABAG / Züblin participate in JobRide.
- The companies offer a web- and app-based ride sharing solution to their employees free of charge
- The decision was made to use an existing ridesharing solution. This is the one important infrastructure which is necessary for the measure to work. Each company has purchased licenses for its employees.
- JobRide is available for all employees of the participating companies - no matter whether one offers or seeks a ride and regardless if one wants to commute together regularly or occasionally. An agency was selected to develop a name and corporate identity for the project. In harmony with the design under the title "JobRide", advertising materials were produced to advertise the implementation of the solution. The official launch of "JobRide" took place on 21 February 2018. Several newspapers reported about the scheme's launch.
- Now there are other companies that the city of Munich succeeded in gaining for the cooperation. A network meeting was held at the beginning of October 2018 to

discuss a re-launch in the first quarter of 2019. Following this meeting, the companies were provided with extensive support materials in order to make the ride-sharing solution known to their employees and, if necessary, use incentives to support it. In the laboratory area, Parkstadt Schwabing, further companies were also invited to participate.

What changes and why?

- There are no significant changes in all three submeasures, except for the extension of the Living Lab, which results in a larger number of households and child care facilities to be addressed.

Stakeholders involved

- Project managers of other mobility management schemes (e.g. MM projects targeting citizens moving newly to Munich) were involved to ensure the residential scheme is in line with other activities. The planning department has been approached to make sure the information to be shown and communicated is in accordance with transport planning of the area. Materials have been reviewed by local neighbourhood organisations and politicians of the Living Lab to bring in their local expertise and ensure accuracy of information. Cooperation with mobility service providers has been established in order to agree on test ticket models.
- The Department of Education and Sports will be involved as a multiplier.
- Day care centres (e.g. Kindergarten) and schools (primary, secondary) as target groups will be involved.
- The Department of Labour and Economic Development is involved as the coordinating authority for economic issues. “JobRide” was realized with the support of this department “JobRide”. In addition, the provider of the software solution is another important stakeholder.

Infrastructure required for the solution to function?

- Data query to obtain population data of the living lab; data management software to process population data and manage individual orders of materials and test tickets as well as individual mobility counselling. A call centre is required for telephone counselling after the test phase of the mobility offers.
- The measure is not expected to require any infrastructure.
- The ridesharing app functions as a technical solution for the formation of ride sharing.

Link to other measures

- The measure provides information on all other ECCENTRIC measures being implemented in the Living Lab. Therefore, exchange with other measures is continuous to make sure the mobility management communicates the other measures’ aims and features accurately. The residential mobility management scheme can be considered a promotion instrument for other measures (and sustainable mobility overall).

- The measure has a link to measure MAD 4.2, which is intended to raise awareness in the field of safety on the way to school.
- In general, measure MUC 5.9 (mobility stations) also has a positive effect on company mobility management, supporting a sustainable path to work.

Timeframe

- Product development, authoring of texts, data audit and acquisition, development of mobility counselling service is planned to be finished by March 2019.
- The production of the materials will be finished March-April 2019.
- The first mailing of the welcome package is targeted for May 2019.
- The "Walking Bus" is currently being carried out in the project area. Further measures will be added in the first half of 2019.
- The planned implementation is on schedule. It is now important to achieve a critical active mass of users in order to stimulate participation.

2.3.3 Business model and contractual partnerships

Ownership of the measure

- The mobility management scheme is a service by the local authority, i.e. City of Munich. It is funded by CIVITAS ECCENTRIC.
- If the scheme proves to be successful partnerships may be established with real estate stakeholders who develop housing projects in other development areas in Munich.
- The measure for child care facilities partly makes use of existing initiatives (such as the walking bus).
- The measure "JobRide" belongs to the City of Munich.

Formal relationship between the public authority and the industry partner

- There is a cooperation between the City of Munich and the companies which has no formal basis, it is voluntary on the companies side. These are global companies that only come into limited contact with the authorities of the state capital of Munich in their day-to-day business. In the first phase of "JobRide", for example, a basis of trust had to be built up in order to win the companies for the project.

Financing

- The CIVITAS initiative MUC 2.9 "Neighborhood oriented marketing of sustainable multimodal mobility services" is funded by the EU.
- Due to the extension of the Living Lab, which doubles the number of households to be addressed, municipal budget has been added to the scheme.
- The "Company Mobility Management" programme was also financed by municipal funds.

2.3.4 Critical challenges and success factors

Direct and dialogue marketing for private households about sustainable mobility

- **Balanced proportion of mobility information:** The welcome package should provide sufficient information to give an overview of mobility measures being implemented in the area so that every household is overall informed about the project's and city's activities. However, information should not be too detailed since the aim is to make the reader curious so that he/she orders additional material and can be consulted through dialogue marketing.
- **Communication of information:** the style and wording of information should be understandable for people of all ages and educational backgrounds. Language and topics should not be academic. Since attention rates are generally decreasing, information should be short, concise and make people curious.
- **Mobility test tickets:** Good cooperation with mobility stakeholders should be established as it is the test offers that make the product exciting and allow citizens to familiarise with mobility services they don't use regularly.
- **Collaboration with local stakeholders:** Neighbourhood organisations and people living and working in the area have more detailed local knowledge than the city's project managers for mobility management. They can provide local information, double-check materials and help advertising the scheme. In return, mobility management products can promote the organisation's activities.
- **Planning and building a new district takes several years.** It is challenging to identify the right phase for residential mobility management. When the first residents move in, most of the area is still a construction site and there are only few mobility offers and facilities available that can be promoted. Mobility (and other) infrastructure and services are being developed step-by-step. There is also uncertainty in the beginning whether all measures will be realised as planned. If the mobility management is carried out right at the beginning of the building phase, all information would need to be updated regularly and produced again. This is difficult in terms of economic viability. If the scheme is carried out when building is completed, the first residents have been living there for several years already. For the pilot measure in ECCENTIRC, a compromise has been decided: to begin the mobility management when about two thirds of the households have moved in.
- **Unknown level of mobility knowledge:** It is unknown how familiar residents are with the city's mobility system and local mobility options available to them. Some might be new in the city, some have been living there for decades. Mobility behaviours vary. Information and communication needs to cater for all knowledge levels and behaviours.

Mobility education and training for children, educators/teachers and parents

- The success of this measure depends on the commitment of parents, educational institutions and children towards sustainable mobility.
- When implementing measures, it is important to involve parents in the long-term mobility education of their children. This is the only way to achieve a sustainable impact.
- It is important to cooperate well with all stakeholders. They can provide information on which activities can be implemented well in the relevant environment and which have met with a positive response.
- It has already been shown that the families in the project area are already very well connected. This is a benefit for the measure.

Mobility management for companies

- Companies already participating in the ridesharing solution need support in communicating the "JobRide" measure. Advertising material is currently being developed, such as an animated film to make the measure known among employees.
- New companies in the laboratory area need to be recruited for the measure. They have many questions in advance which have to be answered thoroughly. For example, there is a problem with the "company car guideline", which prohibits the transportation of persons from outside the company. The question of data protection is also often asked, and open questions are also important to be clarified with the support of the software provider.
- It is important to achieve a critical mass of drivers and passengers in the coming period. Only if there are enough offers and requests, persons can match and form a ride-sharing group. Otherwise the interest in ridesharing would quickly fade if the experience was made too often that no match could be found. Nevertheless, Parkstadt Schwabing is an excellent location for cross-company ridesharing, as the district contains around 200 companies.

2.3.5 Lessons learned from implementation/replicability

Direct and dialogue marketing for private households about sustainable mobility

- It is important to analyse all available data about the district and its residents (household sizes, age groups, socio-economic backgrounds etc.) to be able to provide information and advice based on actual characteristics and needs, and to identify topics relevant to those living there.
- One should be accurate in the information one provides. Residents will notice when local information is incorrect. This would risk losing trust in mobility management.

Mobility education and training for children, educators/teachers and parents

- It can be assumed that anonymous neighbourhoods with less social infrastructure need more support to establish a “walking bus” and a basis of trust. But also well networked neighbourhoods are dependent on the initiation of the measure.

Mobility management for companies

- It takes a long time to establish the trustworthiness and willingness of the companies to cooperate. This is a period of time that one should definitely consider. The daily business of most companies is not about mobility, it is about other products and services. Business representatives are often not mobility experts. This means that one must first convince them of the added value of ridesharing in order to be able to clarify the details after a positive decision.

2.3.6 Recommendations*Direct and dialogue marketing for private households about sustainable mobility*

- Promote sustainable mobility in subtle but practical ways. For instance through topics that are of interest to residents (e.g. produce a mobility map that also provides information about locations that are frequently visited by residents; produce material on attractive leisure activities that provides information about how to get there, instead of developing material with sole focus on a transport mode).
- Don't communicate information and advice in an ideological way. Residents should not feel that their current mobility behaviour is wrong but that there are many more options with advantages that can help them in organising their mobility better (and more sustainable).
- Put focus on both traditional and new mobility offers as it is the mix that makes it attractive to use private cars less often and sustainable mobility options more often.

Mobility education and training for children, educators/teachers and parents

- One should know very well the area where the measures are implemented in order to know where there is potential demand and what exactly works.
In the case of the laboratory area in Munich, many families in the Domagkpark quarter are already quite well connected.
- Relevant stakeholders should be involved in the conception and implementation of a measure. This includes schools and day-care facilities, but also the parents as well.

Mobility management for companies

- The core business of a company usually has priority over a voluntary project, which is the case with JobRide. One cannot force companies to participate. That's why it is necessary to prepare everything that participation is as easy as possible for the companies.
- It is important to be prepared for specific questions from companies and to offer assistance.
- The companies involved should be familiar with each other and give their basic consent to the cross-company formation of car sharing.

- One also has to accept that the influence on major company decisions is limited. Every company structures itself and its decision-making processes differently.
- How quickly a rideshare solution can be introduced and inter-company cooperation can be initiated depends entirely on the company.
- It is important that the companies involved agree on a fixed date for the start of ride-sharing. The users must find offers and requests, otherwise the interest is lost very quickly.
- Companies should be encouraged and supported to promote the new solution in-house for the launch of JobRide. This could be an intranet posting, a newsletter or an information booth in front of the canteen.
- If necessary, it can also be suggested that companies engage a single person to promote the new solution within the company.
- A common online platform where companies can exchange information is very helpful. As a coordinator, all companies must be encouraged to participate actively in the discussion. This online platform may need to be moderated.

2.4 MUC 2.10 Transfer, exchanging ICT for everyday mobility between generations



Figure 5: Transfer workshop in Munich. Source: Green City e.V.

In this measure, schoolgirls and boys aged between thirteen and seventeen teach senior citizens how to use web based applications for organizing their daily mobility. Teenagers and seniors will acquire knowledge about sustainable mobility and climate change and become aware of the relation between global warming gas emissions and their own mobility patterns.

They will be informed about the various possibilities of sustainable mobility and will be encouraged to change their current choice of motion towards more sustainable options like walking, cycling, public transport and sharing solutions.

2.4.1 Introduction

"Transfer" is an environmental education project which aims to empower teenagers and elderly people to rethink their decisions and take responsible actions related to their own mobility patterns. The main objective is to enable senior citizens to organize their daily mobility with the aid of modern communication devices such as computer, tablet or smartphone. Both target groups, elderly and teenagers, will acquire knowledge of sustainable travel options and will be motivated and inspired to use environmentally friendly means of transportation. Along the way, incentives for alternative mobility solutions are placed by highlighting the benefits of applications and web pages. The overall result is the reduction of traffic and CO₂ emissions in urban areas.

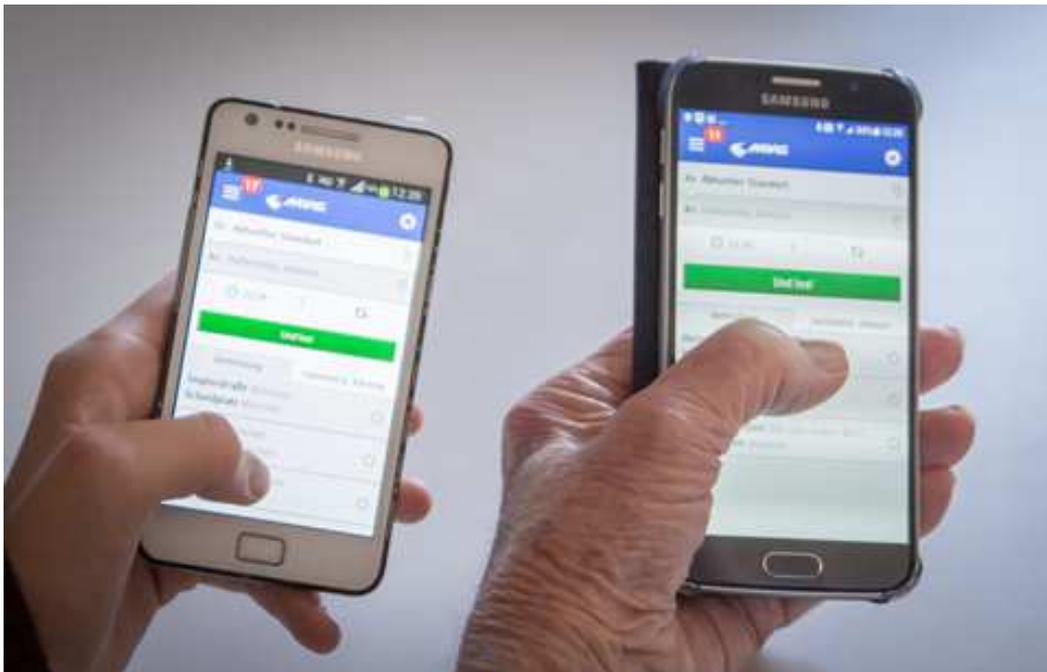


Figure 6: Transfer workshop in Munich. Source Green City e.V.

2.4.2 Implementation

Key Steps

The research and planning phase for this measure started in autumn 2016 and can be considered as an on-going process because each workshop series needs to be prepared in an iterative development.

During the first phase of the project the following activities have been carried out:

- The concept of the workshop programme has been developed (e.g. number of modules, focus areas, order of teaching, definition of web-based and app-based mobility services to be explained) and adopted. The themes are structured along the following topics: Workshops 1 & 5: Introduction, Workshops 2 & 6: Local public transport I, Workshops 3 & 7: Local public transport II, Workshops 4 & 8: Long-distance journeys by coach and train
- The educational material has been developed (e.g. presentations, work sheets, exercises).
- Secondary schools have been approached to motivate and convince them to participate in the measure (mails, letters, phone calls).
- Elderly people have been contacted to participate in the Workshop (by press releases, advertisement in institutions for elderly people)
- Until August 2018 the Workshop series have been implemented six times with an overall number of 95 elderly people and 130 pupils as participants.

- 10 more Workshop-series will be implemented until summer 2020, thereof two are already in the planning phase for autumn/winter 2018.

Changes

- After a couple of implementations it appeared that the total amount of eight workshop dates makes it difficult to acquire schools for the Measure. The original idea of four workshops for only pupils and four workshops for both generations together had required too many lessons besides the regular schedule. The teenagers do not necessarily need four preparation Workshops before encountering with their elderly students. They are familiar with technical devices and acquire new knowledge much faster than senior people.
- Furthermore, less meetings help to keep senior citizens motivated for the whole workshop series. The workshop meetings have been reduced from four to three, while the time frame has been increased from 120 to 180 minutes. This new model has significantly reduced the dropout rate of elderly participants.

Stakeholders involved

- The stakeholders involved in the project are secondary schools. The work was done together with all regular levels of secondary schools in Germany: Mittelschule, Realschule, and Gymnasium. In particular, these are: Mittelschule an der Wiesentfellerstraße, Rudolf-Diesel-Realschule, Carl-von-Linde-Realschule (2x), Mittelschule an der Cincinnatistraße, Theodolinden-Gymnasium.

Required infrastructure

- Computer equipment and WIFI is required: each group, ideally consisting of one pupil and one elderly person, needs their own computer with internet access. Because of the large number of participants, two computer rooms are preferable. As most schools do not permit pupils, teachers and visitors to access their wireless network, a mobile router from Green City e.V. is used in the workshops.

Link to other measures

- There is no link to other measures.

Timeframe

- The timeframe for the implementation depends on the number of workshop series that should be implemented. One series includes eight workshops with a duration of 90 minutes. Every implementation requires preparation work which consists of approaching schools and elderly people, as well as preparing the worksheets and lessons. It has proven that enough time should be scheduled for the search for participants beforehand. Schools plan their curriculum well in advance so for arrangements several months can be taken into account. Also the designation to the elderly is advisably done weeks in advance. Approach and communication with senior participants can take more time than expected, so should not be underestimated. There is also post-processing work like reflexion, coverage and evaluation to be done.

2.4.3 Business model and contractual partnerships

Ownership of the measure

- The owner of the innovation is the organization Green City e.V.

Formal relationship between the public authority and the industry partner

- There is no industry partner involved.

Financing

- The measure is funded by the EU.

2.4.4 Critical challenges and success factors

- The main challenge is to find secondary schools with enough time resources to take part in the project. Principals and teaching staff consider the subject as interesting, but Measure 2.10 requires many extra hours besides the regular schedule which is not possible to manage for many schools. To solve this problem, schools with a particular focus on social or environmental science are privileged, because they are able to integrate the workshop series into their regular curriculum. Another solution is to offer the workshop series in the course of special project days or compress the preparation workshops for the students into one project day. For the workshops with elderly people it is not recommended to summarize the lessons. Too much new input at once is not recommended for the senior citizens and thorough repetitions are inevitably for a transfer and the application in their daily routine. If there is no other option, the amount of workshops can be reduced from eight to six or even five, thereof one or two preparation workshops less for the pupils and one workshop less for the final generational exchange.
- Additionally, it can be challenging to find enough elderly participants for the workshops, especially ones that are interested in the course's main topic "mobility". It seems that several elderly people only participate to receive a free smartphone/internet introduction.
- The solution includes a well prepared PR work and the communication of the workshop series in particular distribution lists (like the newsletter of Green City e.V.) which are predominantly subscribed by ecologically orientated persons. On the other hand, the announcement of the course as a free computer and smartphone workshop attracts people who have never thought about changing their mobility patterns. This helps to sensibilise a wider range of the target group for ecofriendly solutions.
- Elderly people only participate in one or two workshops instead of the whole series. To solve this problem, the amount of workshop meetings have been reduced from four to three times, while the workshops' time frame has changed from 90 min (2 lessons) to up to 135 min (3 lessons). Good experiences have been made with this new model and the dropout rate has been reduced significantly.

Key success factors and minimum requirements

- The concept of the Transfer workshop series has been successfully tested various times. Younger and older participants confirmed the value of the content taught and the exchange between generations was evaluated as very precious for both groups. The trainings sensibilise all participants for the need to use environmentally friendly modes of transport. The course enables participants to extend their mobility radius and confidence is strengthened to use public transport.
- A key success is the intergenerational approach. Senior citizens learn from teenagers how to use web based applications and technical devices for planning their daily mobility. However, the pupils benefit from gaining social and teaching skills.
- The experience of “being old” by wearing the old age suit gives the teenagers a better understanding of arising problems. One of the key success factors of the project is that the exchange about a special topic fosters intergenerational understanding along the way.

2.4.5 Lessons learned form implementation/replicability

Instructive advice to other cities considering replicating the measure:

- **Content of the workshops:** The aim is to facilitate the planning of sustainable transport possibilities tailored to individual needs. Therefore, the most important information about public and long-distance transport services and the related web-based-functions is supposed to be delivered first. Integrating general internet functions in the workshop helps to reach more people, even those who are not interested in an ecological lifestyle in the first place.
- The focus of the first preparatory lessons for the pupils is the sensibilisation for the effects of their own mobility patterns on climate change and fostering their understanding of needs and impairments of elderly people. For this issue, the old age suit is a highly recommended tool.
- **Approaching teenagers:** It is recommended to cooperate with secondary schools. This facilitates engaging an adequate number of teenagers for the project. In addition, continuity is assured because schoolboys and girls are obliged to take part in the workshops in most cases. Advice for a successful cooperation with schools can be found in the section “critical challenges and success factors” above.
- **Approaching senior citizens:** The highest response resulted when publishing the project in the local press. In comparison, asking in institutions for elderly people required too many personal resources and did not bring the expected results. Nevertheless, it can be an option to cooperate with selected centers, associations and clubs where elderly people like to gather.

2.4.6 Recommendations

- In a new conception of the workshop series, the amount of workshops should be reduced to only five: two with pupils and three with the elderly people together. If there are less training sessions elderly people do not have the possibility to repeat content which is necessary for a long-term learning effect. If there are more than three workshop events, it gets more and more difficult to keep the old people engaged for the whole period and, additionally, it makes it difficult to cooperate with secondary schools. For the preparation with teenagers two meetings are an adequate number.

2.5 RUS 2.11 Information, training and awareness raising



Figure 5: Opening event in Ruse

A large percentage of the people living in Druzhba District use private cars and taxi services to reach the city centre, resulting in congestion, traffic accidents, air pollution and noise. The measure is expected to raise general awareness of sustainable mobility and road safety in general, especially among school children and younger people. Existing and new sustainable mobility offers and services available in Ruse will also be promoted.

2.5.1 Introduction

The main objective of this measure is to raise awareness of the necessity and benefits of sustainable mobility in the city of Ruse and its importance for improving the quality of life. A training measure for public transport staff, six workshops for citizens and NGOs, three mobility conferences and a large media campaign for stakeholders and the school community have been carried out. The aim is to encourage the various stakeholders to adopt sustainable mobility habits by making walking and cycling safer and a more comfortable way of travelling in peripheral areas and cities.



Figure 6: Training event in Ruse

2.5.2 Implementation

Key steps

- The transport workers and the people of Ruse had no information about sustainable mobility and its importance for improving the quality of life. Mobility does not exist as a department at the local Technical University. There is a lack of school programmes on mobility education and road safety for pupils and students, which contributes to a high risk of traffic accidents with pedestrians.
- During the research and planning phase, measure leader CSDCS established first the stakeholders' list. The list was updated after the entering into force of the new Bulgarian government by the end of April 2017. Nowadays we encompass all the relevant stakeholders influencing the decision making process and shaping the public opinion in the target peripheral region and on the whole territory of the city.
- CSDCS is a National Mobility coordinator and a SUMP Focal point for Bulgaria and we maintain the EPOMM/ENDURANCE network being in permanent contacts with our stakeholders at national level. We have relevant information about the training needs of different stakeholders' groups and we permanently update this information using primary and secondary sources (past projects' reports from TRANSDANUBE and BUMP-projects).
- The opening event of the measure on 19th of Feb.2017 was very successful and had large media coverage. We started working on the on the second phase (implementation) in February 2017.

- Since February 2017 we already successfully performed five training seminars – for professionals in transport (in February 2017); for Druzhba citizens (in May 2017), for Ruse NGOs involved in green issues and transport safety (in September 2017), for school children (December 2017) and for academics (teaching staff and doctoral students) from the Ruse Technical University (in May 2018).
- After the trainings people in Ruse understood that mobility and accessibility are part of the quality of life and are their human rights thus raising the concept of MaaR (Mobility as a Right), officially registered by a Spanish company called ETRA. The Ruse interpretation of MaaR was presented during the CIVITAS Forum 2017.
- The First ECCENTRIC Conference was organized on 19th October 2018 in Ruse with the main topic “Social aspects of Mobility” The event has been extremely interesting and has given rise to a broad media response. Reports were presented on projects related to transport, mobility and tourism in Ruse. The TU Ruse Prof. Dr. V. Pencheva outlined the directions for the development of the mobility and the main social aspects of the implemented measures. The plenary was followed by a business lunch and discussion around the round table on Green Public Procurements and their application in transport.

Changes

- There have been no changes during the implementation of the measure and no changes are planned in the future. Measure 2.11 will be implemented on time and will produce the planned improvements. The trainees were very satisfied with the events held.

Stakeholders involved

- There are many target groups: politicians, local authorities, transport professionals, local citizens and their organisations, NGOs, young people, scientists and companies. Therefore, the new mobility measures foreseen in the CIVITAS ECCENTRIC project need to be widely discussed and promoted in order to change the mindset of all stakeholders.
- Right from the start, CSDCS planned to include as many auditors as possible for the activities within Measure RUS 2.11. The project started with the training of the transport professionals working for the municipality. Workshops with Living Lab inhabitants (in the Druschba region) for schools, NGOs and science were carried out. The first conference on the role of mobility in quality of life was organised.

Required infrastructure

- The implementation of this measure does not require any specific infrastructure. The conference rooms and the necessary equipment for conducting the seminars and conferences are provided by the subcontractor “Communication 1” Ltd.

Link to other measures

- The measure is linked to all other Ruse measures because it aims at raising the awareness of the citizens and stakeholders about the implemented CIVITAS

ECCENTRIC measures in Ruse and at providing support for their implementation and use.

Timeframe

- The measure includes a series of training events (seminars for specific target groups) and three conferences and will be developed during the duration of the project. Till the end of 2018 5 seminars and one conference were conducted. In 2019 the 2nd conference and one training will be organized in 2020, the final conference and training seminar will take place.

2.5.3 Business model and contractual partnerships

Ownership of the measure

- CSDCS is the owner of the measure and, as this organisation has the most important mobility competence in Bulgaria (source: CEREMA, 02.2018), the training will be carried out with its own lecturers. CSDCS prepares the presentations and training materials.

Formal relationship between the public authority and the industry partner

- CSDCS has subcontracted an organisation for the events according to the "bid-at-three" procedure and selected an experienced company called "Communication 1" for the invitations, the conference room, the necessary equipment and the catering. The subcontractor is doing a very good job.

Financing

- The measure is financed by the project budget.

2.5.4 Critical challenges and success factors

- The most important challenges in the implementation were related to the interest of the participants. After so many activities and events since 2000 that have produced almost no results, the Bulgarian stakeholders are tired and difficult to justify participating in further project events. The most important success factors of our measure are the good cooperation with the municipality, the high political support for the project in Ruse, our participatory approach to the involvement and participation of the participants (tailor-made seminars for each target group), a well-organised distribution of the invitations and attractive agendas of the seminars. A long-term cooperation with the local media and their sometimes even cost-free support is very helpful.

2.5.5 Lessons learned from implementation/replicability

- It is recommended that other cities set up specific agendas for the various target groups and take their needs into account when presenting the materials. Particular emphasis should be placed on road safety and on disadvantaged groups (children, the elderly, handicapped people, etc.). Academic presentations are not interesting for the general public, but people like very illustrated examples, short films showing some good practices from other cities with similar problems, and the opportunity for discussion and exchange of views among participants.

2.5.6 Recommendations

- It must be communicated that mobility is understood as a human right and what the concept of mobility as a right (MaaR) implies.
- Policy makers are recommended to remember that sustainable mobility is an important indicator for a better quality of life in cities and an important tool to reduce climate change.

3 Lessons learned from implementation

- The measures of the third cluster of Work Package 2 face similar problems: people from different target groups need to be activated in order to change their transport behaviour in a positive direction towards environmentally friendly means of transport.
- Measures to influence transport demand initially appear unpopular, especially when the behaviour of individual road users is affected. Influencing transport demand therefore only works if management measures do not point the finger at the individual and do affect one's mobility possibilities.
- Ideally, mobility management measures create "win-win situations". An example of a win-win situation in mobility management is the "Promotion of Ride-Sharing for commuters" in Measure 2.9. As a result the society (the environment, the residential and living environment) as well as the individual (the road user, the company) wins.

Addressing of target groups appropriately

- The settings and positions of people are not static. Rather, the targeted influencing of the individual's attitude or the emotional attitude of the road user is the starting point for a changed choice of means of transport. Not the means of transport, but the specific requirements of the target group and the purpose of the journey are at the centre of the tailor-made support for the choice of transport mode.
- Measures MAD 2.8 and MUC 2.10 address children and young people. Mobility management for young people is primarily concerned with creating a positive climate for the benefit of the environmental network. The aim is to dissolve the tendency towards a strong car orientation by getting a driving licence from the age of 18. Rather, young people should consider public transport and bicycles as alternatives to cars. The integration of mobility education into the curriculum can be effective. This may be better established in schools with a social or environmental focus. After the focus was placed on these schools, Leaders of Measure MUC 2.10 had an easier access to participating schools to provide pupils with instructions on how to teach seniors how to use the Internet and smartphones. They should be able to reorganise their daily mobility needs.
- Measure MUC 2.10 follows the approach of many active participatory activities that address younger people and that are fun-oriented. In this way, new mobility opportunities can be subtly introduced and practiced.
- Senior citizens are also addressed in Measures MAD 2.8 and MUC 2.10. Demographic change presents society with new challenges: birth rates are declining, general life expectancy is rising and the proportion of older people in urban areas will rise significantly. These developments make it necessary to rethink old patterns of behaviour and to develop new concepts - including new mobility concepts. For example, the increase in the number of older road users and the increase in the population in cities call for new solutions to maintain the mobility of older people. The main aim here is to show senior citizens the options for transport, especially in public transport.
- Uncertainty in the use of public transport often contributes to a reduction in the mobility of older people. Measure MAD 2.8 addresses three factors at once:

encouraging mobility also for elderly people has a positive effect on health, helps to prevent loneliness and, as a result, is linked to the cooperative handling of tasks in which older people would otherwise have difficulties or need support from some other people.

- In measure MUC 2.10, addressing senior citizens for mobility training via care and service centres that offer all-day care for elderly people turned out to be difficult. Addressing senior citizens via the press worked positively and raised interest of many older participants. Here it is important to communicate the planned intention exactly: Misunderstandably, some seniors focused on training the use of PCs and smartphones, not on learning how to organise their own everyday mobility.
- In general, mobility management can address specific residential locations or groups of residents, as in Measures MUC 2.7 and MUC 2.9. In this context, a good starting point is important for awareness-raising campaigns to break existing mobility routines. This could be, for example, a move to a new neighbourhood.
- Mobility routines are newly learned after a removal, new ways explored. The newly developed area in Domagkpark and Parkstadt Schwabing is therefore ideally qualified for reaching new residents. In measure 2.9, this is done by implementing a dialogue marketing campaign, which will be rolled out in three waves until 2020, thus addressing all newcomers and those who are following later.

Prepare information and test offers for sustainable modes in an attractive and appropriate way

- A multimodal approach and the support of intermodal route chains should be attractively presented through information materials and test offers in Measure MUC 2.9. When communicating neighbourhood-specific information on sustainable transport options, it is important to ensure that it meets the needs of residents. Otherwise, the materials will be considered worthless and there will be no dialogue about the mobility behavior.
- Furthermore, it is important to ensure that this information does not have an instructive character. Otherwise the mobility campaign would risk losing openness to the advice given. Residents must feel taken seriously and understand that one does not want to limit their mobility possibilities, but rather to draw their attention to new options.
- Test offers, for example in the field of public transport and sharing modes, need to be attractive so that common barriers such as the registration or the time required to familiarise oneself with the service will be willingly accepted. In the best case scenario, the first-time use should lead to a steady use of various mobility offers that make it possible to do without a private car. Trial offers can include, for example, free minutes or free registration. The combination with counselling after the first use increases the probability of the continuity of new mobility routines.
- Measure RUS 2.11 also aims to address the target group by means of tailored information and seminars as an essential moment. This includes, for example, topics that meet local interests, such as road safety or disadvantaged groups. As with Measure MUC 2.9, the target audience should not be addressed at an academic level. Rather, it should be done in a manner which is close to citizens, including

illustrated examples. This improves the participation and resonance of the target group.

Consider digital developments

- Websites are a great way to achieve a large outreach. But as smartphones become more and more widely used, apps are often the medium of choice to get content.
- The website of Measure MUC 2.7 is only accessible as a pure Internet presence via a browser. Nowadays, apps are also very common when online content is viewed via smartphones. However, the website also works very well on a smartphone and does not have any features that currently require an app.
- By developing pure websites, the range could be extended by linking to the city's well-attended website to draw the attention of interested citizens to the neighbourhood and inform them when attractive events take place in a neighbourhood. On the other hand, visitors to the neighbourhood website can easily find out about city content.

Achieve critical mass for cross-company ridesharing

- The advantage of company mobility management is that the target group can be addressed easily. There are defined communication structures and mediums between all participants at the location (employees, as well as their interest groups on the one hand and the company management on the other) - such as the bulletin board, intranet, employee meetings or e-mail newsletters. These information channels can also be used for company mobility management, which makes communication much easier.
- However, the implementation of measure 2.9 is not a self-running success; it is not enough to provide the employees of the participating companies with free access to software. It must be strongly communicated within the companies that there is a company mobility management scheme and "JobRide", how it works and what the additional value for the individual and the company can be. Pointing out the added value seems to be particularly difficult. Employees need to be made aware of the fact that it can be just as comfortable to commute without their own car or take a colleague with them and that new contacts within or across companies can be enriching. Financial advantages are another argument, but should be communicated carefully, as this is perceived differently among employees.
- It is important to acquire further companies with large numbers of employees for the implementation of the ride-sharing solution. Only a large number of people who offer and request a ride can achieve a critical mass that makes the use of the ride sharing solution interesting.
- However, ridesharing can only be one of many components of a successful corporate mobility management. Further measures or a selectively suitable infrastructure need to be created, such as secure bicycle parking or parking management concepts for the company car park.

4 Conclusions and Next Steps

Mobility management is an approach in the field of passenger transport that initiates new cooperation and provides a package of measures to stimulate and promote efficient, environmentally and socially compatible (sustainable) mobility. The measures are essentially based on information, communication, organisation and coordination. Marketing is essential for their dissemination. Mobility management "lives" less through technology than through actors - i.e. people, their tasks, their personal commitment and their convinced commitment to sustainable transport development.

In the measures described, the work is being intensively pushed forward and continued. The measures face similar challenges, but are working on different solutions to overcome them. The next project phase will focus on demonstration tasks, which include the following activities for each measure:

<p>MUC 2.7 Community information and participation portal</p>	<ul style="list-style-type: none"> • Better integration of the offers of the Eccentric partners in Munich • Linking to Portal nebenan.de to allow users easy access to a "marketplace function" that the website cannot offer • Active advertising, e.g. with stickers with QR codes leading to www.domagkpark.de • Expansion of contacts to social and cultural institutions and businesses in the neighbourhood to increase the financial reserves of the website. • In order to facilitate the replicability of the measure, focus will be put on pursuing cooperation with other app services to bundle information and offer new functionalities
<p>MAD 2.8 Mobility Management strategies for vulnerable groups with a gender approach</p>	<ul style="list-style-type: none"> • ECCENTRIC continues this year with more activities for elderly and younger people • In Madrid, the city wants to continue with this successful workline in next years
<p>MUC 2.9 Neighbourhood oriented marketing of sustainable multimodal mobility services</p>	<ul style="list-style-type: none"> • Mobility management for residents will be demonstrated at full scale starting from summer 2019 • Further measures to achieve a sustainable mobility education for children and young people are work in progress • The companies will be provided with comprehensive support material for the internal announcement of the ride-sharing solution. These include information e-mails, advertising materials, as well as suggestions for setting up a parking management system or campaigns such as actions and competitions among the users of the ridesharing offer. • In addition, there are also plans to create an online platform

	<p>for the closed circle of users on which companies can exchange information on questions of company mobility management and especially ridesharing.</p> <ul style="list-style-type: none"> • JobRide will be extended to other companies in Parkstadt Schwabing and the area of the City of Munich
<p>MUC 2.10 Transfer Exchanging communication and information technology for everyday mobility between generations</p>	<ul style="list-style-type: none"> • A new focus (besides the implementation) will be on dissemination and press publication • A video is planned to be created, as well as more articles about the ongoing workshops will be published on our homepage and in local media • New recruitment channels to reach teachers will be detected • Furthermore, research will be done if there are already round tables or newsletters for teachers who are interested in environmental topics.
<p>RUS 2.11 Information, training and awareness raising</p>	<ul style="list-style-type: none"> • The implementation phase of this measure is permanently ongoing because after each event (training events, roundtable discussions and conferences) CSDCS is performing evaluations by disseminating questionnaires to participants and assessing the results • During the next 1,5 project years two more trainings and two conferences are planned for discussing the impact of the ECCENTRIC measures in Ruse.

5 Sources /References

Inputs by measure leaders.