



EIT Urban Mobility COVID-19 Crisis Response call Selected projects

CITYRESTARTS - CITY RESilient Safe Transport for All: Reliable Taxi Sharing

CITY RESTARTS will be the first large-scale public Taxi sharing deployment in Europe to supplement public transportation. Through CITY RESTARTS, *Municipality of Milan, AMAT, ViaVan and Fondazione Politecnico di Milano* aim to address the impacts of Covid-19 working with underutilised taxi services to supplement a city's PT system. The project will allow citizens to book shared taxi rides by an app that automatically assigns the most relevant taxi and optimises driver routing. Contagion will be tackled by vehicles equipped with divider screens between the passengers to ensure public health and safety and an additional screen will be used for up to 3 passengers to ride isolated with individual access and safety.

Output

- Increased access to safe and affordable PT for all
- Reduced risk of COVID contagion, providing additional income for taxi drivers and safety in the workplace for essential workers
- Mitigation of increased usage of single occupancy private vehicles due to COVID-19 fear
- Reduced overall environmental impact of reversing of the mobility shift
- Increased city's ability to execute on future sustainable mobility policies

Project Partners

AMAT (Italy), Fondazione Politecnico Milano - FPM (Italy), City of Milan (Italy), Viavan (The Netherlands)



Shared mobility

13-Jul-20 31-Dec-20

Lead:

AMAT

Cities

Milan

Budget

€699,937

CAMS - Covid Adapted Moto-sharing Services

Free-floating moto-sharing has been identified as the best approach to complement personal mobility in crowded cities. COVID-19 is jeopardising the financial viability of free-floating moto-sharing due to a decrease in user engagement. According to the latest mobility polls, COVID-19 has reduced the number of users for sharing mobility services by 26% with the correspondent decrease in the revenues for service providers. Along with less revenues come higher operation costs due to repetitive high cost sanitation. CAMS solution is a self-cleaning surface able to provide permanent and passive protection for users. Nanocare's nano-technology, Liquid Guard® is able to eliminate virus, microbial, bacterial and fungus, without costly human intervention.

Barcelona is well-known as the European city with the highest rate of motorbikes per inhabitant. The perfect city to test Liquid Guard® in moto-sharing services. SEAT is going to launch a moto-sharing service through its affiliated entity XMOBA in the following months. The best scenario to test against COVID-19.

Output

- Increased safety of the users and their confidence in shared mobility
- Tested solution that could also be viable for other modes of mass transit

Project Partners

Elisava Barcelona School of Design and Engineering (Spain), SEAT (Spain), XMOBA (Spain), Nano-Care Deutschland (Germany)



Hygiene

1-Jul-20 31-Dec-20

Lead:

SEAT

Cities

Barcelona

Budget

€662,484

RAPID - RApid Prototyping In 3D

RAPID will use rapid prototyping in 3D to support city decision making and citizen engagement around changes and interventions to the built environment in response to COVID-19 mobility restrictions, de-escalation phases and social distancing. A library of 3D city assets with associated rules to investigate different options on how to use newly liberated urban space - either temporally or permanently set aside due to COVID-19. It will include the ability to view citizen behaviours through the use of agents in a variety of new designs for "set-aside" space. Whilst the focus of RAPID is the response to the current COVID-19 crisis, it will have value beyond as cities explore new urban designs in response to changing citizens' behaviours. The COVID experience and the immediate need and backlash against curbing urban space for single vehicles is a pivotal moment in which these methods can be developed at speed and their outcomes valorised.

Output

- Library of 3D city assets to assess how to use newly liberated urban space
- Informed decision making and engaged citizens leading to greater acceptance of new post-COVID urban spaces, mobility means and agile redesign of public spaces.

Project Partners

City of Copenhagen (Denmark), Studio Profondo (Italy), University College London - UCL (United Kingdom), Fraunhofer -Gesellschaft zur Förderung der angewandten Forschung e.V -FhG (Germany), Municipality Of Sabadell (Spain), Pixel Mill (United Kingdom)



Place & Space

1-Jul-20 31-Dec-20

Lead:
UCL

Cities
**Copenhagen &
Sabadell**

Budget

€347,686

CD CLEAN - COVID19 new disinfection formulation

After a technological development already carried out, the target of the project is to manufacture and apply a permanent disinfectant for public open spaces that will eliminate SARS-CoV-2. The disinfection will be focused on very crowded public places such as big city centers, airports, malls, stations, especially public transport and big metropolitan areas. This innovative disinfectant formulation adheres to the most common surfaces in public spaces; glass, metal, ceramics and plastics, while remaining biocidal. Quick chemical tests can be done in-situ to assess the need to apply it again, which is very important in terms of sustainability as it reduces the current practice of repeated treatments which are harmful to the environment. Being able to optimise disinfection by means of a disinfectant attached to the surfaces of public spaces will give the new population confidence in their mobility. The solution will be tested in Barcelona metro station Bus of Barcelona Barcelona City Council

Output

- Reduced risk of transmission and propagation of COVID-19
- Increased confidence in public transport and safe mobility
- Reduced environmental negative impact of repeated disinfection

Project Partners

City of Barcelona (Spain), Barcelona Metropolitan Area - AMB (Spain), Metro de Barcelona - TMB (Spain), Urban Buses of Barcelona - TMB (Spain), Ferrovial (Spain)



Hygiene

1-Jul-20 31-Dec-20

Lead:
Ferrovial

Cities
Barcelona

Budget

€531,187

FutureMob - Safe Transport and Commuting, a fast track to the Future of Mobility

Future Mob consists of monthly mobility challenges based on a tested gamification approach developed by Ciclogreen. The project will be delivered through an existing app and a website that will reward citizens and corporates for working from home, managing their mobility, encourage sustainable alternatives which are COVID-19 negating. The initiative is supported by Lobelia who has recently co-developed with the Dutch air quality service providing street-level concentrations of NO₂ and PM in near real time. The service is operational in Barcelona city and will be extended to its metropolitan area, adding a Covid-safe feature. Economic mobility will be addressed by allowing small local businesses showcase their products in the app and website at no cost. This will also reduce carbon and delivery costs from last-mile logistics.

Output

- Reduced crowds in public transport, stimulate physical distancing
- Support to small local businesses
- Reduced overall environmental impact from last-mile logistics

Project Partners

Moven (Spain), ZONE Cluster (Hungary), Barcelona Metropolitan Area - AMB (Spain), CIT UPC (Spain), EDC Debrecen (Hungary), Lobelia Earth (Spain), Ciclogreen Move And Win (Spain)



Place & Space

1-Jul-20 31-Dec-20

Lead:
AMB

Cities
**Barcelona &
Debrecen**

Budget

€401,413

FURNISH - Fast Urban Responses for New Inclusive Spaces and Habitat

Through 'tactical urbanism', FURNISH will reconfigure a street expanding the space for pedestrians and leisure, engaging local makers and digital manufacturing via the quick and effective deployment of urban elements in a neighbourhood. FURNISH will bring a series of Mobile Urban Elements (MUE) designed to be temporarily installed in public spaces. In association with the Fab Lab Network (Barcelona) and a consortium of municipalities, FURNISH will connect citizens with Fab Labs, coordinating several workshops in *10 pilot cities*, in which citizens will jointly: design, produce and manage the implementation of digitally manufactured MUEs in their cities, to temporarily designate new more attractive pedestrian-oriented spaces.

Output

- Established community of tactical urbanism first responders
- Increased quality of public space for use by pedestrians and cyclists
- Increased local digital fabrication capacities
- Mitigated overcrowding of urban public space
- Reduced contagion of COVID-19 in urban public spaces
- Increased local resiliency

Project Partners

CIT UPC (Spain), Elisava Barcelona School of Design and Engineering (Spain), Technical University of Catalonia - UPC (Spain), Institute for Advanced Architecture of Catalonia - IAAC (Spain), Milan (Italy), AMAT (Italy)



Place & People

1-Jul-20 31-Dec-20

Lead:
UPC Technology Center

Cities
Milan & Barcelona

Budget

€348,488

Safely Connected - Sustainable Common Accessibility of Lively Downtowns for Healthy People

By associating public administration, researchers and local craftsmen and shopkeepers, Safely Connected will introduce a series of flexible physical and digital tools allowing the safe relaunch of local economy and urban life in a new COVID-19 reality, with urban pedestrianisation being a means to strengthen of the community sense and improve urban social resilience. The project will render the city-centre an open air commercial and urban life environment aligned to COVID-19 norms and realities. The solution will be developed and tested in Saint Germain-en-Laye and scaled-up and replicated in similar localities as well as for a neighbourhood centre or a street of a metropolis.

Output

- Multi-modality and multi-functionality as enabling the more sustainable use of space
- Optimised accessibility, deliveries and traffic flows with the expansion of active mobility offer
- Promotion of the 15-minute city to reduce the need for longer journeys
- Strengthened micro-mobility and active transport

Project Partners

Cap Sgl (France), Politecnico di Milano - POLIMI (Italy), Fondazione Politecnico di Milano - FPM (Italy), City Of Saint Germain-En-Laye (France)



Logistics & Space

1-Jul-20 31-Dec-20

Lead:
POLIMI

Cities
Saint Germain-en-Laye

Budget

€722,500

CommINSAFE- CommutING with ShAred mobility covid-FrEe

In a post-lockdown “new normal” world, mobility solutions must tackle critical aspects such as ensuring safety, healthy commuting modes used by people that trust each other and can easily be traced. Mass modes of transport, where social distancing is often an insurmountable obstacle - how can this be addressed. CommINSAFE develops and introduces to the market a technological solution consisting of a mobile application for shared mobility services accompanied with a data management system of disinfection facilities and users’ profile. Car-pooling, ridesharing and demand responsive transport by shuttle buses are offered as suitable alternatives to public transport; as well as management of facilities for rapid disinfection of vehicles

Output

- Encourage commuters to share their ride using private cars, taxis and buses
- Improved mobility services provided to commuters combining the experience of private transport operators, the private car owners' intention to help and the knowhow of the UV disinfection technology providers
- Increased potential of expansion of car-pooling, ride-sharing and DRT

Project Partners

Municipality of Sant Cugat Del Vallès (Spain), Factual (Spain), Synetairismos (Greece), - Centre for Research & Technology Hellas - CERTH (Greece), KTH Royal Institute of Technology (Sweden), Groupito (France)



Shared Mobility

1-Jul-20 31-Dec-20

Lead:
CERTH

Cities
Sant Cugat del Vallès & Thessaloniki

Budget

€548,532

CoVCAP- Coordinating Volunteers supporting COVID-19 affected Persons

CoVCAP provides cities with a toolkit for targeting volunteer support to the most vulnerable in our communities during crises. Unpaid carers, informal support networks, volunteers and support professionals are meeting critical demand for the most vulnerable , the ill, socio-economic excluded elements of society who needed basic support to carry out living tasks including shopping, refilling prescriptions, travelling to medical appointments. CoVCAP is a platform that enables the local authority to manage non-urgent but essential COVID-19 demands. Local Authorities can use this tool to coordinate segmented volunteer communities and individuals to respond to the non-essential demands of vulnerable groups. The platform provides scheduling tools, feedback loops and can manage new contacts as well as importing existing datasets from multi-agency sources.

Output

- Mitigate the impact of COVID-19 and maximised scarce resources
- Micro-mobility for societal good.
- Strengthened urban societal fabrics and reduces the costs of the "care society" during COVID-19.

Project Partners

The Urban Institute Hungary (Hungary), - Budapest University of Technology and Economics - BME (Hungary), Municipality of Budapest (Hungary), [Ui!] The Urban Institute (Germany)



Vulnerable People

1-Jul-20 31-Dec-20

Lead:
BME

Cities
Budapest

Budget

€355,373

InclusivEbike

The COVID-19 pandemic is affecting societies and economies at their core. Italy and Spain are the two EU countries most affected by the pandemic. It will most likely increase poverty and inequalities at a global scale, making achievement of SDGs even more urgent. Supporting the mobility need of vulnerable groups is fundamental to allow frail group to recover from the crisis and ensure that no one is left behind in this effort. InclusiveBike aims to develop and demonstrate a new concept of rickshaw e-bikes to promote safety and comfort by extending inclusiveness to frail and vulnerable people that have seen their mobility and physical activity strongly reduced due to COVID risk associated to transport. Inclusiv_eBike promotes a new era of personalised transport capable to promote inclusion and assuring social distancing, transport sustainability and healthy aging.

Output

- Improved safety, comfort and accessibility
- Increased use of eBikes within cities, contributing to workers wellbeing, while assuring social distancing

Project Partners

Municipality Of Bergamo (Italy), One Less Van (Italy), Bilbao City Hall (Spain), Bosch VHIT (Italy), Nova (Italy), Tecnalia (Spain), Modena Energy And Sustainable Development Agency (Italy)



**Vulnerable
People**

1-Jul-20 31-Dec-20

Lead:
Tecnalia

Cities
Bilbao & Bergamo

Budget
€699,225

CO-APS - Crowdsourced Obtention and Analytics of Data About the Crowding of Public Spaces for the Benefit of Public Transport and Mobility in Cities

COVID-19 is spreading, and spatial distancing is one of the preventative measures taken worldwide. With mobility restrictions being eased in most countries, people are encouraged to go back to work, use of Public Transport (PT) and share public spaces. Pre-COVID crowds will have challenges to maintain the required distance. CO-APS will implement Mobile, Web and Cloud technologies based to collect data and provide analytical solutions with added value information about crowds and their mobility that will be tested in various use cases & small-scale-pilots in train stations, pedestrian commercial streets, multi-modal mobility, and transport hubs.

Output

- Crowd management solution
- COVID-19 data and movement system tested in RIS countries
- Informed administrations, transport authorities and public safety agencies: operational changes to tackle COVID-19

Project Partners

Universitat Politècnica de Catalunya - UPC (Spain), Air Institute (Spain), Metro de Barcelona - TMB (Spain), Uitp (Belgium), Egte Efxini Poli (Greece), City Of Saint Germain-En-Laye (France), Sofia Development Association (Bulgaria), Istanbul (Turkey), tbc partner (Greece)



Models, Tools & ICT

1-Jul-20 31-Dec-20

Lead:
UPC

Cities

Saint Germain-en-Laye, Sofia, Istanbul & Barcelona

Budget

€398,686